マケドニア旧ユーゴスラビア共和国
森林火災危機管理能力向上
プロジェクト（システム改良）

業務完了報告書

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独立行政法人 国際協力機構（JICA）

共同企業体
ワイ・エス・ケイ　コンサルタンツ株式会社
国際航業株式会社

マケドニア旧ユーゴスラビア共和国 全国図

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1　　　業務の目的

１．１　　業務の背景

　マケドニア旧ユーゴスラビア共和国(以下マケドニア)は国土面積の約 38%を森林地帯が占めている。近年マケドニアを含むバルカン半島地域全体では、大規模な森林火災による被害が深刻な問題となっている。マケドニアにおいては、過去 10 年間で、森林火災の発生件数は約 2,400 件、消失した森林面積は約 9.6 万 ha(東京都面積の約半分)、被害総額は約 60 億円に及ぶと推計されている。特に 2007 年に広範な地域に及んだ大規模森林火災が発生した際には、国家緊急事態宣言が発せられる事態となる等、森林火災は国家的課題の一つとなっている。

　マケドニアでは 2005 年に様々な国家的脅威の予防・早期警戒のための情報蓄積と分析を行い、関係各機関との連携・調整を図ることを目的とした「危機管理センター(Crisis Management Centre: CMC)」が設立され、森林火災の予防・警戒の任務もこの CMC が担っている。森林火災に係る情報が CMC で一元管理され、情報に基づく分析結果や提言が迅速に関係機関や国民に伝達され、大規模な森林火災による被害発生を抑制することが期待されている。しかし、CMC は、関連する情報の収集・蓄積・分析に要するシステム整備と同システムの利用能力、さらに関係機関との連携調整能力が十分でないという課題を抱えている。

　このような背景から、マケドニアより CMC 能力強化の要請がなされた。これを受けて、JICA は 2011 年 5 月から 2014 年 4 月まで 3 年間の予定で技術協力プロジェクト「森林火災危機管理能力向上プロジェクト」を実施中であり、現在チーフアドバイザー/森林火災管理及び業務調整/情報システム整備運用の 2 名の長期専門家を派遣している。本プロジェクトは、森林火災の予防・早期警戒に関する CMC の調整能力の強化をプロジェクト目標として、①森林火災のリスクアセスメントのためのハード面(情報システム)及びソフト面(関連組織・人材)の仕組みの構築・整備と②関係者間の連携・情報共有の体制強化を行うものである。

　上記①におけるハード面の整備と関連人材の強化については、これまで平成 23 年度に、2 名の GIS 短期専門家とネットワーク設計専門家を派遣し、災害危機管理のための統合G1S 作成のための概念設計、基本設計、詳細設計を行い、さらに平成 24 年度にこの設計を基にマケドニア業者によるシステム構築が行われている。同システム構築においては本邦から 3 名の短期専門家を派遣、品質管理や構築途中での改良等の指導・助言を行い、平成 25 年 2 月にはシステムの第一版がリリースされる予定となっている。

１．２　　業務の目的

　　今回派遣する専門家は、カウンターパート(C/P)機関である危機管理センター(CMC)と共に、上記システムの試験運用をとおして、システム改良点の明確化と改良部分の設計、更にJICAバルカン事務所が契約する現地デベロッパーによる改良作業に対する開発管理を通じ、最終的に、地理情報システム(GIS)を、森林火災の予防、早期発見・警告、対処調整、被害評価等に必要な情報を有し、かつそれらの情報を関係機関間で共有可能とするような GIS として完成させ、更に、今後の拡張・運用に向けた助言・指導を行うことを目的とする。

　　具体的な業務の目的を下記に示す。

(1) 森林火災の予防・早期発見・警告・対処調整・被害評価システムの改良点の明確化
(2) システム改良部分の設計と発注支援
(3) 開発業者の選定支援
(4) 開発業者によるシステム改良作業の管理
(5) システム維持管理体制の構築
(6) データ品質向上のための調査・分析・指導

4

１.３ PDM

PDM ver2 (approved by SC on 15 November 2012)

Narrative Summary	Objectively Verifiable Indicators	Means of Verification	Important Assumptions
Overall Goal The occurrences of massive forest fire are reduced by strengthening the social capacity for prevention (*i) and early warning of forest fire.	1. Data/information provided from CMC to institutions under the Crisis Management System will become more promptly and adequately. 2. Rate of forest fire that reaches massive level will be reduced. Note for Indicators: By March 2013, indicators for the Overall Goal, including definition of "more promptly, "more adequately", "rate of forest fire", and "massive level", will be examined by TCGM and proposal on necessary modification will be submitted to the subsequent SC for approval.	Regulations, guidelines, reports and documents of CMC and of the government of Macedonia	1 There will be no significant change in crisis management policy against forest fires. 2. Unexpected extreme weather will not occur.
Project Purpose The capacity of CMC for transmitting information to domestic relevant institutions (*ii) for prevention and early warning of forest fire and coordinating them is strengthened.	1. By the Project end, modifications in the existing government procedures, necessary to fit the integrated GIS, in legislative framework, are adopted by the relevant authorities. 2 By the Project end, information contained in forest fire risk assessment tools of the integrated GIS at CMC is updated with pre-determined frequency for transmission to the relevant institutions. 3 By the Project end, data/information from CMC based on the integrated GIS is utilized by the domestic relevant institutions for prevention and early warning of forest fire.	1. Records of the date of adoption 2 Record of system monitoring 3 ditto	1. Budget and number of personnel of CMC will not be significantly decreased.
Outputs 1. National system for forest fire risk assessment (*iii), using the integrated GIS (*iv), is developed.	1a By February 2013, integrated GIS is developed based on the risk assessment methodology developed by the Project (i.e. integrated GIS ver1); and is improved by December 2013 (i.e. integrated GIS ver2). 1b From March 2013, all of the data required for forest fire risk assessment with pre-determined time/spatial resolution, provided by PEMF and Hydro-met, is received and stored in the integrated GIS. 1c By February 2013, four forest risk assessment tools (i.e. hot spot map and vegetation dryness map, covering all land of Macedonia, as well as forest vegetation map and fire history map, covering 90 % of forests in Macedonia) are stored in the integrated GIS ; and the other three (i.e. FWI map and suppression resource table, covering all land of Macedonia, as well as damaged forest value table, covering 90% of forests) are stored by December 2013. 1d By March 2013, at least X officers from HQ and regional CMC and X officers from HQ and regional offices of the principal information user institutions (X from PEM, X from MAFWE, X from DPR) are trained in administration and/or utilization of the integrated GIS as well as interpretation of the first 4 forest fire risk assessment tools; and the other four tools by March 2014. 1e By March 2013, information contained in the forest fire risk assessment tools of the integrated GIS is available to the principal information users (*v) through intranet for utilization in prevention and early warning according to the agreed access rights. 1f By April 2013, part of information contained in the forest fire risk assessment tools (ie.X, X, ・・・) of the integrated GIS is published at CMC's website for utilization by other relevant institutions. Note for Indicator 1d: Target number (X) shall be specified by December 2012 in consultation with TCG for approval by the subsequent SC. Note for Indicator 1f: Forest fire risk assessment tools that shall be published through internet shall be identified through consultation with TCG by March 2013. Name of tools to be published (X) shall be specified in the indicator accordingly and modification shall be proposed to the subsequent SC for approval.	1a Inspection report of the system 1b, 1c Record of system monitoring 1d Training record 1e, 1f: Record of system monitoring	Necessary cooperation by allocation of sufficient budget, and other resources by relevant institutions is secured according to the PO approved by the SC.
2. National coordination mechanism of information sharing and cooperation	2a By the Project end, the final draft(s) for necessary modifications of the existing government procedures is (are) submitted by the responsible organizations to the relevant authority/authorities for adoption. 2b By the Project end, a technical-level coordination meeting on prevention and early warning is formalized for the post-project period. 2c By the Project end, recommendations for improvement of coordination, using the integrated GIS, are made based on monitoring in	2a Date of submission of the final drafts 2b&2c M/M of TCG	

among domestic relevant institutions for prevention and early warning of forest fire is reinforced.	some model areas within jurisdiction of selected RCMCs for action by CMC.		

Activities	Inputs	

1-1 Design risk assessment methodology for forest fire and document the methodology (*vi).
 1-2 Identify and collect data/information useful for the forest fire risk assessment.
 1-3 Develop the integrated GIS, including software, hardware and equipment.
 1-4 Prepare and store GIS risk maps and tables for forest fire in the integrated GIS.
 1-5 Design methodology on assessment of damages and consequences of forest fire.
 1-6 Prepare the feasibility study on the technical system for forest fire early detection.
 1-7 Hold training/workshops on the integrated GIS & forest fire risk assessment tools for system users/administrators at CMC and the relevant institutions.
 1-8 Share information for forest fire risk assessment from CMC to the relevant institutions through the integrated GIS.
	Japanese Side
	 1. Experts
	   - Forest Fire Management
	   - GIS system/database
	   - Other fields required
	   Chief Advisor and Project Coordinator will be assigned from above experts.
	 2. Training of counterpart personnel in Japan
	 3. Provision of equipment for the Project activities in the followings:
	   - Forest fire management
	   - GIS system/database
	   - Others if necessary
	 4. Operational costs
		Necessary cooperation such as appointment of users/administrators of the integrated GIS allocation of sufficient budget by relevant institutions is secured according to the PO approved by SC.

2-1 Develop sustainable coordination mechanism of CMC and relevant institutions about information sharing and coordination using the integrated GIS.
 2-2 Periodically organize Technical Coordination Group Meetings (TCGM).
 2-3 Confirm the existing state of coordination of information sharing and cooperation on prevention and early warning of forest fire at some model areas.
 2-4 Assess the effectiveness of the integrated GIS in coordination of CMC and relevant institutions and identify supplementary measures, if necessary, utilizing the results of 2-3.
	Macedonian Side
	 1. Government Staff as Project staff as needed for the Project
	   (1) Project Director
	   (2) Project Manager
	   (3) Project staff (Counterpart personnel)
	   (4) Supporting staff
	 2. Administrative and operational costs
	 3. Provision of land, building, facilities and equipment for the Project.
		Pre-Conditions
		
		 Commitment and willingness of project partners in CMC and relevant institutions.

i   "Prevention" includes risk reduction among others.

ii   "Domestic relevant institutions" targeted by the Project are MAFWE, PEMF, DPR, municipal government, local fire fighting forces and others as required.

iii   Concept of "forest fire risk assessment" consists of four elements (hazard, exposure, vulnerability, and capacity and measure) .

iv   Integrated GIS developed by the Project is known as "Macedonian Forest Fire Information System (MKFFIS)".

v   "Principal information users" targeted by the Project are the relevant institutions, to which equipment for information users are provided (i.e. PEMF, MAFWE, DPR).

vi   "Document of the risk assessment methodology for forest fires" means of a set of specific documents that define integrated method and procedures for work on forest fire risk assessment in all relevant institutions such as: (1) Method of collecting information and utilization of proper equipment; and (2) How to make data collection and how to conduct appropriate data processing.

2 業務内容

２．１ 業務従事者毎の分担業務内容

業務従事者毎の職務の分担表を表１に示し、次いで、業務実施の体制図を図１に示す。

表１：職務分担表

氏名	担当	業務内容
高津　宏幸	総括/システム改良デザイン・開発管理	＜国内準備期間＞
		（ア）情報収集・分析
		（イ）業務計画書の作成・提出
		＜現地調査＞
		（ウ）JICAバルカン事務所へ業務計画書の説明
		（エ）統合GISの改良
		a.ユーザーからのシステムの拡張要求、改善要求の整理・分析
		b.システムの拡張・改善案を検討
		c.現地開発業者への作業指示書案の作成
		d.開発業者へ示す設計内容の最終確認
		e.開発業者選定委員としてプロポーザルの審査
		f.開発工程および質管理
		g.作成済研修教材の確認助言
		h.ユニットテスト、総合テスト結果の検収
		（オ）システム維持業務に関する留意事項等の助言・提案
		（カ）現地業務結果報告書の作成・提出
		＜国内整理期間＞
		（キ）設計内容の最終確認
		（ク）専門家業務完了報告書
森川　悠太	副総括/GISデータ品質向上	＜国内準備期間＞
		（ア）情報収集・分析
		（イ）業務計画書の作成・提出
		＜現地調査＞
		（ウ）JICAバルカン事務所へ業務計画書の説明
		（エ）データ品質評価および研修
		i.GISデータの確認、品質の評価分析
		j.評価分析結果に基づき、必要な研修・指導方法の計画・準備
		k.研修・指導の実施
		（オ）システム維持業務に関する留意事項等の助言・提案
		（カ）現地業務結果報告書の作成・提出
		＜国内整理期間＞
		（キ）専門家業務完了報告書

業務従事の実施体制は以下の通りとした。「総括／システム改良デザイン・開発管理」、「副総括／GIS データ品質向上」の２担当者が連携して調査を遂行した。

現地調査においては、各担当がそれぞれ責任をもって調査を実施し成果を取りまとめていくこととするが、最終的な結果の取りまとめは、２担当者が連携して取りまとめることを基本とする体制を取った。業務全体に対する責任は、高津が担う。

業務総責任者

高津　宏幸 総括/システム改良デザイン・開発管理	⟺ 連携	森川　悠太 副総括/GIS データ品質向上
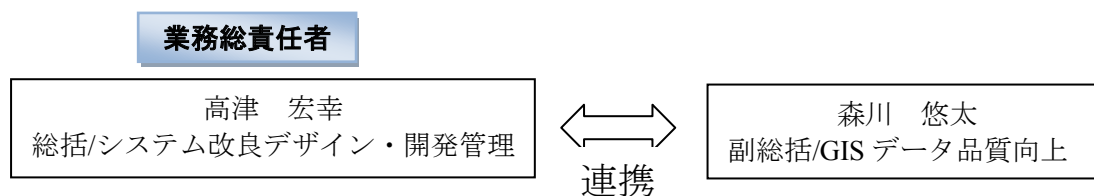
図１：業務実施の体制

２．２　業務実施方法（フローチャート）

　　総括／システム改良デザイン・開発管理専門家は、設計内容確認の為の一時帰国は設計終了後、開発業者の入札が開始される７月初旬に帰国日を選んだ。帰国中には業者選定作業があったが、これは書類審査であるため、電子メールでプロジェクトと連絡を取り対応した。副総括／GIS データ品質向上専門家は、C/P が夏場はフィールド調査に出てしまうため、フィールド調査開始直前の５月中旬と、フィールド調査終了後の１月に派遣日を設定した。

　　業務実施のフローチャートを、図２に示す。

年	2013										2014		
月	4	5	6	7	8	9	10	11	12		1	2	3

図２：業務実施のフローチャート

W/R ＝ 現地業務完了報告書	E/R ＝ 専門家業務報告書
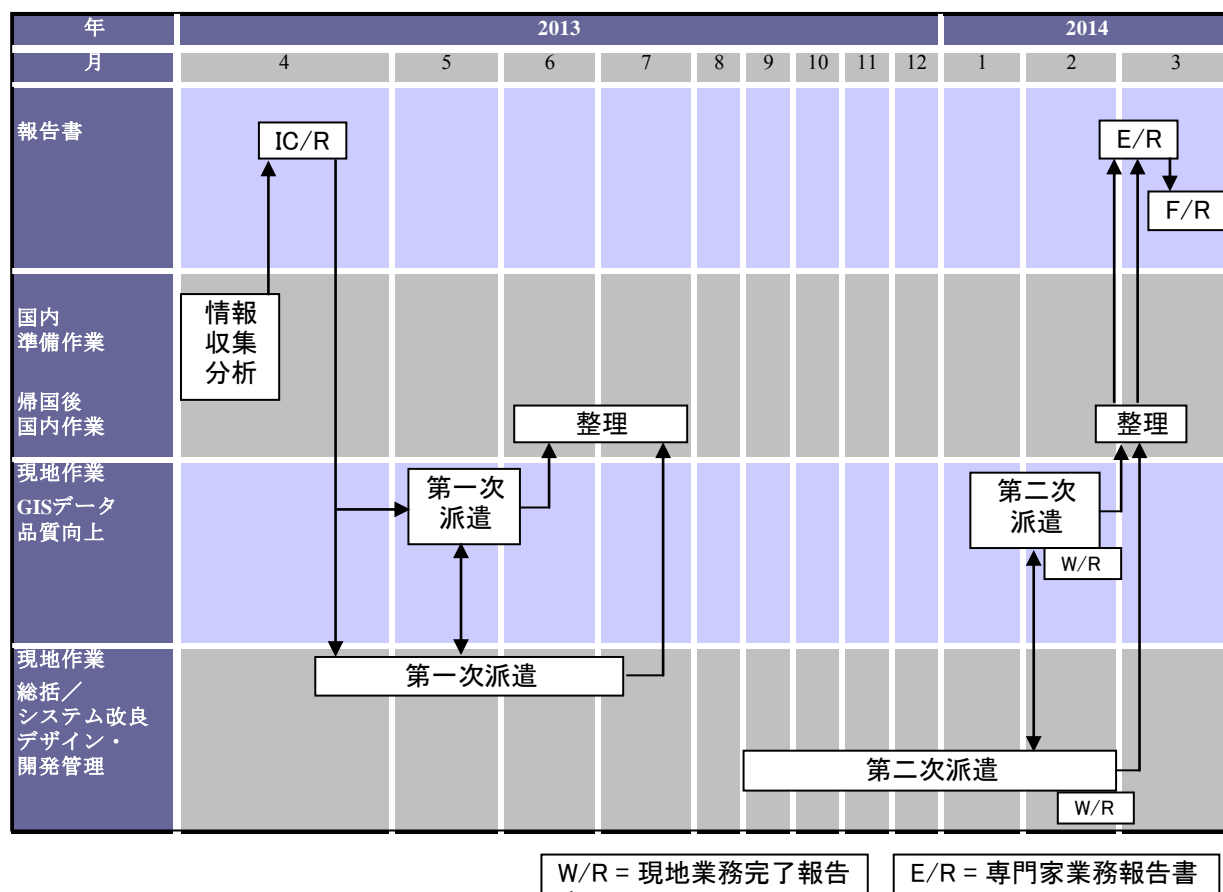
２．３　作業計画・実績

　JICA 指示書に基づき、2013 年 4 月上旬より本件を開始した。 4 月下旬より必要な調査項目に係る現地作業を開始した。2 月下旬に帰国後、収集・解析したすべての情報を取りまとめ、3 月中旬までに業務完了報告書を提出した。作業計画、並びに、実績を表２に示す。

表２：作業計画・実績

期間／作業項目	2013 4	5	6	7	8	9	10	11	12	2014 1	2	3
【総括/システム改良デザイン・開発管理】												
＜国内準備期間＞												
（ア）情報収集・分析	■											
（イ）業務計画書の作成・提出	■											
＜現地調査＞												
（ウ）JICAバルカン事務所へ業務計画書の説明		■										
（エ）統合GISの改良		■	■	■		■	■	■	■	■	■	
a.ユーザーからのシステムの拡張要求、改善要求の整理・分析		■										
b.システムの拡張・改善案を検討			■									
c.現地開発業者への作業指示書案の作成			■	■								
d.開発業者へ示す設計内容の最終確認				■								
e.開発業者選定委員としてプロポーザルの審査					■							
f.開発工程および質管理						■	■	■	■	■	■	
g.作成済研修教材の確認助言										■	■	
h.ユニットテスト、総合テスト結果の検収									■	■		
（オ）システム維持業務に関する留意事項等の助言・提案										■	■	
（カ）現地業務結果報告書の作成・提出											■	
＜国内整理期間＞												
（キ）設計内容の最終確認				■								
（ク）専門家業務完了報告書												■
【GISデータ品質向上】												
＜国内準備期間＞												
（ア）情報収集・分析	■											
（イ）業務計画書の作成・提出	■											
＜現地調査＞												
（ウ）JICAバルカン事務所へ業務計画書の説明		■										
（エ）データ品質評価および研修		■								■	■	
a.GISデータの確認、品質の評価分析		■								■	■	
b.評価分析結果に基づき、必要な研修・指導方法の計画・準備		■								■	■	
c.研修・指導の実施		■								■	■	
（オ）システム維持業務に関する留意事項等の助言・提案											■	
（カ）現地業務結果報告書の作成・提出											■	
＜国内整理期間＞												
（キ）専門家業務完了報告書				■							■	■
期間	4	5	6	7	8	9	10	11	12	1	2	3
総括/システム改良デザイン・開発管理	■	■	■	■		■	■	■	■	■	■	■
GISデータ品質向上	■	■	■	■						■	■	■
成果品等	△業務実施計画書										△現地業務完了報告書	△業務完了報告書

凡例: □作業予定、■ 実績

２．４ 専門家派遣実績（要員計画）

　専門家派遣実績については、添付資料１に示す。

２．５　活動内容

2.5.1　システム改良デザイン (高津: 第一次派遣)
システム改良デザインに係る活動として以下を行った。

2.5.1.1 現地業務開始時に C/P 及び JICA バルカン事務所へ業務実施計画書を提出し、業務内容の確認を行った。また、適宣 JICA バルカン事務所に対し進捗報告を行った。

2.5.1.2 システム改良設計
A)　既存機能改良のための要求分析
B)　新規機能追加のための調査と分析
C)　改良項目の選択
● 実現性の観点から代替案と差し替えた事例はあるものの、結果的に CMC/PEMF の要求の殆どすべてを受け入れた。
D)　改良設計書、作業指示書の作成
● FSD を作成した。 (内容は表３参照)

2.5.1.3 その他の活動
A)　MKFFIS/GFIS の軽微な修正要求を EduSoft 社に対して実施
B)　Milutinovic 教授とシステムアドバイザー契約を締結
C)　FWI/VDM/Hotspot 危険区分調整のためのデータ収集
● 2006 年から 2011 年までの気象データを Hydromet の CLIDAT データベースより入手した。
● 火災履歴については、データの質に問題があるものの、他にデータが無いため、PEMF の森林火災報告書の日報からできるだけデータを採取し、デジタル化した。(7 月に実施) データの質の悪さに対しては、システムモニターに組み込む危険区分動的調整機能により対処した。
D)　国立公園 3 箇所と保護林（Zone1）のデジタルデータを収集
E)　FWI 計算モジュールの軽微なバグ修正を実施
F)　システムモニターを使用した保守システムの確立
● システムモニターを使用した AWS の保守について水気象庁と協議を開始した。
G)　NASA のサイトへの匿名 FTP による衛星データのダウンロードが不能になったため、HTTP によってダウンロードするように植生乾燥度地図作成モジュールを修正

2.5.1.4 改良内容
改良内容を表３に示す。

表3：改良内容

No.	対象	改良内容	責任者
1	MKFFIS GIS	左側ペインの再設計・ユーザインターフェースの向上	developer
2	MKFFIS GIS / Fire Report	ユーザマニュアルへのリンクの追加	developer
3	MKFFIS GIS	季節に応じて背景画像を変更する	developer
4	MKFFIS GIS	1つのカレンダーコントロールによって、VDM, FWI, Hotspot の日付を指定する。	developer
5	MKFFIS GIS	当日の FWI 地図が作成されるまで、昨日の FWI 地図を表示	developer
6	MIFFIS GIS	現状植生図の FMU 毎に表示属性を変更できるようになっているが、FMU 選択画面で一括で表示属性を変更するように改造する。	developer
7	MKFFIS GIS GFIS GIS	新規レイヤーの追加: 国立公園、保護林（Zone1）, MGRS グリッド, CMC Operation Maps	developer
8	MKFFIS GIS	グリッド情報: MGRS コード, 消火リソース集計, 災害集計, 建物・地物の集計, グリッド中心の FWI, グリッド中心の植生乾燥度	developer
9	MKFFIS GIS	人口情報: 行政区域単位の人口集計	developer
10	MKFFIS GIS	RCMC からの実時間災害報告	developer
11	MKFFIS GIS	災害報告の検索	developer
12	MKFFIS GIS	内部用 MKFFIS と公開用 MKFFIS の切り替え機能	developer
13	MKFFIS Fire report	森林火災報告書の気象データ項目を AWS からデータを取得し記入する機能	developer
14	GFIS GIS, Planning, Fire report	ユーザマニュアルへのリンクの追加	developer
15	GFIS GIS	ユーザによって参照可能な FMU を制限する。	developer
16	GFIS GIS	過去の森林計画の参照機能	developer
17	GFIS GIS	森林計画の有効期限によって FMU を検索する機能	developer
18	GFIS Planning	フォーム 3, 3a and 5 を月報から日報に変更	developer
19	GFIS Planning	フォーム 6、8 に対し、各年の達成度を 10 年分保存	developer
20	GFIS Planning	フォーム 1 の面積をポリゴンの属性から自動入力	developer
21	GFIS Planning	レポートメニュー'Rekapitulari' に全国集計、地方事務所集計を追加	developer
22	GFIS Fire report, MKFFIS Fire Report	PEMF 森林火災報告書を火災単位の報告入力に変更	developer
23	MKFFIS, GFIS	性能調整	developer
24	MKFFIS	システムモニター: ① AWS 観測状況, AWS 状態, 各モジュールの状態, Modis/Seviri FTP の状態, Modis raw data の状態, PEMF-CMC 間のデータベースレプリケーション状態 ② 警報機能 ③ 危険区分動的調整機能（FWI/VDM/Hotspot） ④ SYNOP 読み込み機能	Kozu
25	MKFFIS	FWI モジュールの改良	Kozu
26	MKFFIS	VDM モジュールの改良	Kozu

2.5.1.5 上記活動に基づき、現地業務結果報告書(英文)を作成し、C/P 及び JICA バルカン事務所に提出・報告した。

2.5.1.6 帰国中の指示
第一次派遣終了後、第二次派遣までに行うべき以下の事項について指示した。
A) SD1 開発業者の提出物の最終締め切り（8 月 31 日）を必ず守らせる事
B) PEMF が管理している森林と国立公園の森林の属性は共通ではない。このため、国立公園の属性から PEMF 森林の属性への変換表を作成
C) 火災履歴データの入力。入力の前作業として、不要データの除去、FMU ナンバー・シリアルナンバーの付加等、手作業による編集・クリーニング作業を行う事
D) Internet server, Intranet, PEMF Forest server のサーバ OS アップグレード
E) メモリーの増強

F) Intranet Server へ MKFFIS を再インストール (Intranet Server にはデュアル CPU 機を使用すること)

G) PEMF Forest server へ GFIS を再インストール
OS の更新に際してはデータを失わないように注意すること。更新前にデータのバックアップを取ること。

2.5.1.7 帰国中の活動

A) 開発業者選定委員として 2013 年 8 月のプロポーザル審査に加わった。

2.5.2 開発管理 (高津: 第二次派遣)

システム開発管理に係る活動として以下を行った。

2.5.2.1 現地業務開始時に C/P 及び JICA バルカン事務所へ業務実施計画書を提出し、業務内容の確認を行った。また、適宜 JICA バルカン事務所に対し進捗報告を行った。

2.5.2.2 開発工程および品質管理

A) システム開発管理の体系化

　システム開発とデータ作成の円滑な実施を実現するには、工程と品質の両面から、系統的な管理を行う必要がある。CMC、プロジェクト、現地デベロッパーの三者で、工程、進捗報告方法、テスト実施方針、テスト項目設計、提出ドキュメントの種類と内容等の事項で合意したが、合意内容が必ずしも履行された訳ではない。開発業者が更新版のプログラムをテスト機にアップロードする際、更新内容の連絡をしばしば怠るために、プロジェクトが更新内容を探しながらテストするという状況が多発した。この為テスト作業の効率が著しく低下した。

B) ステアリングコミッティーによるシステム開発・進捗管理

　CMC、プロジェクト、開発業者からなるステアリングコミッティを立ち上げ、毎週ミーティングを行った。ミーティングでは進捗の遅れがある場合、その原因が開発業者側にあるのか CMC 等省庁側にあるのかを明らかにし、原因に応じた対策を講じた。

C) 開発管理における変更に係る指導

　システム開発管理において、現地開発業者から提起された改善提案について、制約事項や維持管理の観点から検討し、検討過程を含めた検討結果をプロジェクトに説明した。基本的に業者の提案は発注仕様書に基づくものであり、発注仕様書の範疇を超えるものについては、プロジェクト期間外の保守期間に実施させ、基本設計自体に大幅な変更を生じないように留意した。

D) システム品質管理

　担当コンサルタントが最も力を入れたのがこの部分である。

● システム品質管理は、実際にシステムを作動させ、使用感を確認し、動作、使用感が不適当な場合は開発業者へ改善の指示を行った。常識を超えた数のエラー・不具合を検知し、修正を命じた。これは、開発業者の内部試験プロセスに問題があるか、或いは全く内部試験を行っていない結果だと想像される。また、開発業者の品質管理は貧弱であり、グループ開発に於ける管理が成されていないと想像された。例えば、以前のバージョンで動作していた機能が次のバージョンでは動作しないという事態が頻繁に発生した。これは開発業者のバージョン管理に落ち

度がある訳であるが、プロジェクトが行う機能試験の過程の能率を大きく低下させる原因となった。

- Geoserver が提供する地図と Google マップの位置がずれる問題を完全に解決した。
- GFIS からダウンロードして得られる FMU 地図と iPad 上の Google マップの位置がずれる問題を完全に解決した。
- GFIS からダウンロードして得られる FMU 地図と QGIS 上の Google マップの位置がずれる問題を完全に解決した。
- 旧 GFIS からダウンロードして得られる FMU 地図と QGIS 上の Google マップの位置がずれる問題をカスタム CRS を用いる方法で解決した。
- 上記の位置ずれの問題を解決するために、QGIS・iPad による FMU や火災被害領域の編集作業に全フローに空間参照系 EPSG:4326 を使用するように GFIS 仕様変更を指示した。
- 災害グリッド（MGRS 格子）描画について、Milutinovic 教授から聞き取り調査を行い、開発業者にサンプルプログラムを作成し、開発業者に提供した。
- 任意の地点の FWI を取得するためのサンプルプログラムを作成し、開発業者に提供した。

2.5.2.3 作成済研修教材の確認助言を行った

A)　　マニュアル類作成に対する助言と支援

　　担当コンサルタントが作成したプログラムのマニュアル以外は開発業者が作成し、それに対する指示は本多調整員が行った。

B)　　ユーザトレーニングへの助言と支援

　　担当コンサルタントが行ったトレーニングのマニュアル以外は開発業者が作成し、それに対する指示は本多調整員が行った。

2.5.2.4 現地開発業者によるユニットテスト、総合テスト結果の検収についてプロジェクトの支援を行った。

A)　　改良作業の検収

　　検収にあたっては、設計通りの機能が実現できていることをユニット試験、総合試験を通じて C/P と確認した。C/P との確認は進捗管理会議の中で業者に試験個所をデモンストレーションさせる事で行った。また、機能が実現できていない場合はその旨を業者に指摘し改善を指示した。またより詳細な試験を担当コンサルタントと本多調整員とで行った。この際、担当コンサルタントは主に GIS 部を、本多調整員はシステム全般、主に森林データベース、火災履歴データベース関連の試験を担当した。

2.5.2.5 C/P 及び長期専門家に対して、システム維持業務に関する留意事項等の助言・提案を行った。

A)　システム維持管理体制の確立

　　2012 年度に作成したシステム監視ツールを拡張した Web ベースのシステム監視ツール(MKFFIS monitor)を作成し、CMC・Hydromet に対する使用説明を行った。このモニターは図 3 に示すようにシステムの動作不良を検出した際にトラブルシュートに役立つ情報を出力する。CMC がこのツールを常時モニターする体制を整え、迅速なトラブルシュートが行えるような規則を定めることを提言した。

図 3：MKFFIS Monitor
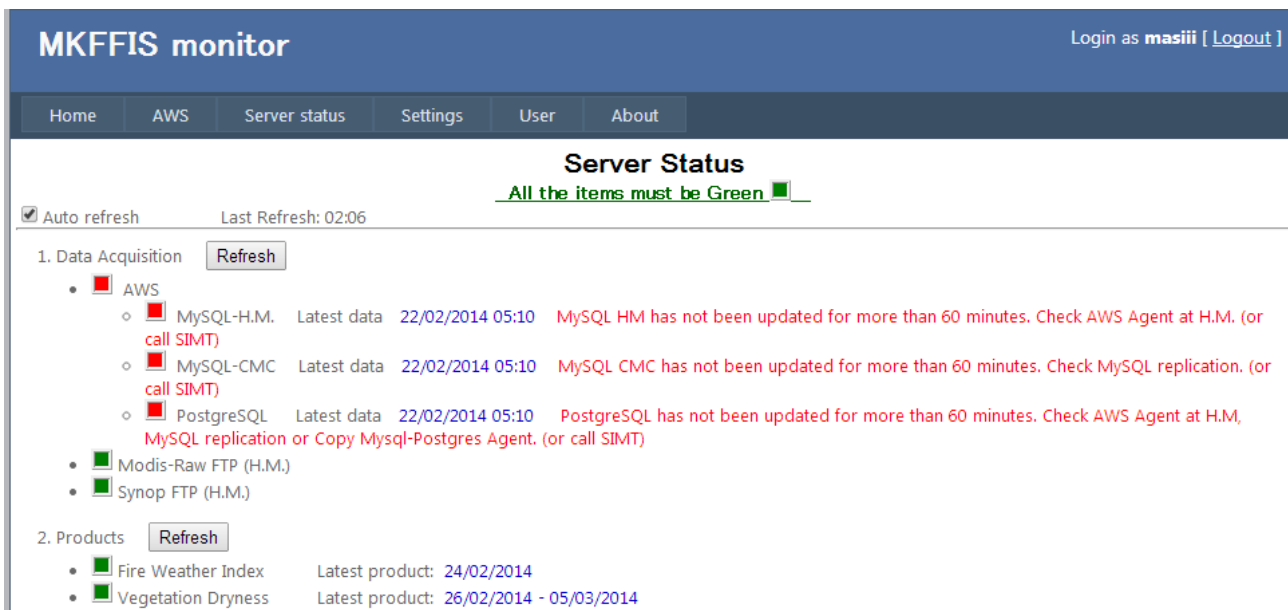
B)　植生乾燥度マップ、ホットスポットマップ生成システムの安定稼働

　　東京大学生産技術研究所沢田研究室による植生乾燥度地図作成システムの動作不良に対処するため、以下の改造を行った。

● 衛星画像受信プロトコルの変更（第一次派遣時に実施）

● Geoserver への植生乾燥度地図発行機能の追加

　　従来、植生乾燥度地図モジュールは地図作成機能しか有しておらず、地図発行は開発業者による別モジュールで行われていた。しかし、この地図発行機能が期待通りに動作せず、技術的に疑わしかったためこの機能を追加した。設計の観点から言うと地図の作成と地図の発行を分けるのではなく、地図を作成するモジュールが地図を発行する方が効率が高く自然である。

● 当該システムのインストール領域の変更

　　当該システムは衛星画像等のデータを蓄える領域として容量の少ない領域が指定されていたため、2013 年末にデータ格納領域がオーバーフローし、動作不良を生じた。この問題を解消するため、より大きいデータ領域を使用するようにプログラムの修正を行った。この修正により 10 年間はオーバーフローしない。しかし、IT 課にはオーバーフローを防ぐために 5 年以上経過した衛星画像を毎

年削除するように指示した。

C)　　ホットスポット受信、FWI 地図作成、植生乾燥度地図発行の安定化

　　上記 MKFFIS システムの主要機能の安定動作のために以下のモジュールを作成した。また、SD1 で開発業者が作成したモジュールについては信頼性と正確性の観点から廃止した。

- fwiEx: FWI 地図の作成と発行を行う。データソースとして AWS を用いる。また AWS のバックアップとして Synop を用いる。SD1 で作成した FWI モジュールは廃止した。
- modisFtpEx: Nasa の FTP サーバより modis ホットスポットを取得し、ホットスポット地図を発行する。SD1 で作成した modis FTP モジュールは廃止した。
- modisRawEx: Hydromet の衛星サーバより Modis Raw データを取得し、ホットスポット地図を発行する。Modis Raw も Modis FTP も同じデータなので、本モジュールは上記 modisFtpEx のバックアップとして動作する。Modis Raw データ取得方法は SD1 で開発業者が提案した Delta-Copy が使用されていたが、原因不明の転送障害が度々生じ、障害の解決には業者に依頼して数日掛かるという状況であった。その為、データ取得方法を IT 課独自で対応可能な FTP に変更した。変更以降安定に動作している。
- cleanModisRaw: Modis Raw データはサテライトサーバ内に蓄積されるため、オーバーフローを防止するため定期的に削除する必要がある。本モジュールはデータ取得状態を確認後安全に Modis Raw データを削除する。
- seviriFtpEx: Eumetsat の FTP サーバより seviri ホットスポットを取得し、ホットスポット地図を発行する。SD1 で作成した seviri FTP モジュールは廃止した。
- fwiAutoPublish: FWI 地図が作成された時点で Geoserver に障害がある場合、地図の発行は失敗する。このモジュールは作成されているにも関わらず発行されていない FWI 地図を検索し発行する。このモジュールにより FWI 地図の発行し残しが解消する。
- vdmAutoPublish: 上記 fwiAutoPublish 同様、作成されているにも関わらず発行されていない植生乾燥度地図を検索し発行する。このモジュールにより VDM 地図の発行未遂が解消する。
- fwiChaser: ホットスポットには属性としてその地点の FWI と VDM の階級が付加される。しかし、FWI 地図は毎日 14 時に作成されるため、ホットスポットが出現した時間に FWI 値が決定されているとは限らず、属性として付加できない場合がある。このモジュールはホットスポットの属性をチェックし、FWI もしくは VDM の階級を有しない場合にそれらを付加する。

2.5.2.6 研修

　　以下の研修を行った。

A)　　GFIS-QGIS-iPad を使用した FMU と火災被害領域の編集実習

　目的 ：　PEMF Forest Engineer が業務フローに添って FMU、火災被害領域の編集を実習することで、GFIS システムを利用した FMU と火災被害領域の編集、新規作成を行えるようになる。

　内容 ：　作業を通して使用する座標系の解説、編集作業環境の構築、GFIS より FMU シェープファイルを取得、FMU の QGIS による編集、iPad へ FMU をアップロード,iPad 上で火災被害ポリゴンの描画、GPS を利用した火災被害ポリゴンの描画、iPad で作成した火災被害ポリゴンの QGIS による編集、旧 GFIS で作成した FMU データの変換

日時： 2月20日　全日

対象： PEMF Forest Engineer 3名

成果： 参加者の内、Miroslav Grujevski 氏は、教材内容を自主的に検証し、実習を行っており、他の PEMF 職員に対する教育役として十分な知識を得ることが出来たと考える。他の2名に関しては本多調整員や秘書の Gjorgji 氏の支援でひと通り教材の内容をたどったに過ぎず、研修の成果は無きに等しい。

B)　　　MKFFIS Monitor AWS 監視部の使用方法研修

目的： Hydromet 職員が MKFFIS Monitor の AWS 監視機能を AWS 維持管理計画立案に利用できるようにする。

内容： AWS データ取得画面の解説、AWS 受信データ画面の解説、AWS 直近データ取得日時の表示、AWS ゲージチェッカーの解説、AWS データのダウンロード。

日時： 2月21日　1時間

対象： Hydromet 予報部3名、気象部 2名、IT部1名

成果： 従来、JICA が供与した AWS のデータを Hydromet 職員が目にする事が無く、AWS データを彼らの業務に役立てるどころか、その可能性を議論する術も提供されていなかった。それにも関わらず AWS の維持管理については Hydromet が行うことになっているが、Hydromet の JICA 供与の AWS に対する維持管理の動機付けについては望むべくもなかった。今回の研修によって、JICA 供与 AWS のデータ利用の可能性を提供できた。また、全 AWS の現状を一覧できる View を提供することができた。今後、仮に JICA 供与 AWS のデータが Hydromet によって利用される事があれば AWS 維持管理のモチベーションの向上もあり得るかもしれない。しかし、現状では JICA 供与の AWS は FWI 作成にのみ使用されており、それ以外の用途に流用できるか否かは確認できていない。

C)　　　MKFFIS Monitor 研修

目的： CMC 職員が MKFFIS Monitor を利用して MKFFIS システムの異常をいち早く把握し、トラブルシュートを行えるようになる。

内容： MKFFIS モニター機能説明、日々のチェックポイントの説明、設定変更時の注意点、ユーザー管理

日時： 2月21日　2時間

対象： CMC 分析部3名、IT 課3名、プロジェクト3名

成果： MKFFIS システム維持管理に必要な日常のモニター作業を集約し、一覧できるビューを提供し、その利用方法について習得した。これにより、MKFFIS システムの監視と故障時対応の効率向上が期待できる。

2.5.2.7 Milutinovic 教授とのミーティング

A)　　　目的：MGRS 格子描画に関する情報収集

　　10 月 24 日午前中：高津

B)　　　FWI 危険クラス再設定に関する情報収集

1 月 29 日午前中：高津・佐藤
C)　　FWI 危険クラス再設定に関する情報収集
2 月 24 日午後：高津・佐藤

2.5.2.8 上記活動に基づき、現地業務結果報告書(英文)を作成し、C/P 及び JICA バルカ
ン事務所に提出・報告した。

2.5.3 GIS データ品質向上 　(森川: 第一次、第二次派遣)

GIS データ品質向上に係る活動として PEMF を対象に以下を行った。

2.5.3.1 システム設計書等、これまでの短期専門家による成果品を確認し、プロジェクトで構築する統合 GIS システムについて設計方針、利用方法、必要な機能等を理解し、総括/システム改良デザイン・開発管理専門家と共に業務実施計画を作成した。

2.5.3.2 作成した業務実施計画書(和文、英文)を JICA 地球環境部へ提出し、業務の履行について協議を行った。

2.5.3.3 現地業務開始時に C/P 及び JICA バルカン事務所へ業務実施計画書を提出し、業務内容の確認を行った。また、適宜 JICA バルカン事務所に対し進捗報告を行った。

2.5.3.4 システムエンドユーザーをサポートする立場の CMC・IT 部署およびマケドニア森林公社(PEMF)・IT 部署と共に以下の業務を行った。
A) PEMF がシステム開始後に入力・修正した GIS データの品質を評価分析した。
B) OJT(On The Job)トレーニング形式でデータ作成・編集サポート/指導を行った。
C) PEMF 単独で行う FMU データ作成の補助及び指導を行った。
D) A)の分析結果に基づき必要な研修を計画・準備した。
E) 上記研修・指導を実施した。
F) データ品質評価手順書の更新及びデータ品質手順書（簡易版）を作成した。
G) FAQ を作成および更新を行った。

以下、上記 A-G につき詳細を記す。
A) GIS データ品質評価
　2013 年 4 月からシステム運用が始まり、PEMF による GIS データ編集が開始された。基本操作研修およびシステム利用研修を受けているとはいえ、初期段階においては予期せぬエラーや課題が発生した。そこで夏場にフィールド調査にでる前、5 月中旬から下旬において編集した GIS データを昨年度作成されたデータ品質管理手順書に基づいて品質を評価した。また、年明け後には夏に実施されたフィールド調査結果を GIS データに反映する作業において編集された GIS データを評価した。
　その結果、確認されたエラーや課題に対して、データ編集者へ解決方法を指導するだけでなく、後述する FAQ やデータ品質管理手順書(簡易版)に内容を反映した。
B) OJT トレーニング
　第一次派遣においては、システム開始直後であり、編集された GIS データは限られたものであったため、データ編集作業を行うエンジニアに対して一人ひとり聞き取り調査を行い、編集操作方法等、各人が抱えている問題を確認し、解決方法を指導した。
　第二次派遣においては、後述するレビュートレーニングの成果もあり、より多く

のエンジニアが GIS データ編集を行った結果、各人に割く時間は限定的なものにもなったが一次派遣時同様、聞き取り調査、問題確認、解決方法指導を実施した。

C) FMU データセットの作成

　既存データの編集作業と異なり、新たな FMU データセットを PEMF 独自で作成する必要があった為、担当職員には編集作業とは異なった機能の利用方法、効率的な作業方法、精度の高いデータ作成方法など通常業務とは異なる作業内容、配慮を指導した。なお、一次派遣期間中では完成しなかった為、帰国後もメール、データのやりとりで完成させた。

　また、本プロジェクトにおけるシステム開発中も通常業務は実施されていた影響で一部データは業者が作成した GIS データ（shapefile）よりも CAD データの方が情報として新しいという 15FMU に関しても通常の編集作業とは異なる技術が求められる。特に CAD データの活用方法は CAD データの精度次第で有益な情報になる時もあれば、逆に活用を試みることで非効率的な作業となることもある、昨年度の業者の経験も情報共有しながら編集方法の手順を協議し、一部技術指導を行った。

D) 研修の計画・準備

　A で実施したデータ品質評価及び PEMF への聞き取り調査を元に研修を計画・準備した。なお、昨年実施した研修では GIS の一般的な概念の説明や、主要なコマンドを習得することも目的としていたが、本年の研修では、実作業において利用するデータを研修に用いたり、習得する操作内容も実務に必要ものに特化したりとより通常業務に活かせる内容になるよう配慮した。

E) 研修の実施

　D の計画・準備に基づき、研修を実施した。なお、詳細は業務完了報告書添付資料「研修実施実績」に記載したが、概要は下記である。

①リフレッシュ研修
　目的　　　：昨年実施した研修後に実業務で QGIS を使用していないエンジニアが実務に沿った作業が実施できるようになる。
　内容　　　：QGIS1.8 による基本操作及びデータ編集作業の習得
　期間　　　：1/23,24(2 日間)
　参加人数：12 名（1 名のサポート含む）

②最終研修
　目的　　　：実務に必要な作業を QGIS2.0 上において行えるようになる事。作成したデータの品質管理手順を習得する事。
　内容　　　：QGIS2.0 により基本操作、データ編集、品質チェック作業の習得。FAQ の共有。
　期間　　　：2/18,19,21(3 日間)
　参加人数：21 名

F) データ品質評価手順書の更新及びデータ品質手順書（簡易版）の作成

　昨年作成されたデータ品質管理手順書は GIS データの管理責任者にとっては知っておくべき内容であるためシステムの変更点などを踏まえて更新した。また C/P と協議した結果、データの品質には責任者だけでなく、各エンジニアも持つべきとの結論に至った為、複雑かつ高度な内容を含む上記の手順書とは別に、簡易版を作成

した。なお、内容に関しては C/P と協議を行うと共に、上記最終研修において説明、実習を行った。

G）　FAQ を作成および更新

　　第一次派遣、第二次派遣共に実施した PEMF 職員へのヒアリングでは数多の質問や課題が挙げられた。OJT 方式で解決方法を指導したが、組織内での情報共有ができるように、FAQ を作成した。（添付資料 3 参照）

2.5.3.5　C/P 及び長期専門家に対して、システム維持業務（特にデータ品質向上・維持）に関する留意事項等の助言・提案を行った。

2.5.3.6　上記活動に基づき、現地業務結果報告書(英文)を作成し、C/P 及び JICA バルカン事務所に提出・報告した。

3　　プロジェクト実施運営上の課題・工夫・教訓

　下記にプロジェクト実施運営上の課題・工夫・教訓を業務実施方法、運営体制等の観点からまとめた。

３．１　システム改良デザイン・開発管理

① 　　　開発業者選定の困難さ

　マケドニア国内インターネットを介して新旧 MKFFIS のスピードを比較すると、新 MKFIS は旧 MKFFIS に比して４倍以上の処理速度を計測している。また、スピードと使い勝手の両面で新 MKFFIS に対する好意的な意見が研修参加者から寄せられている事から、SD2 の目的は概ね達成されたものと言えよう。SD1 から SD2 へと保守期間を介して継続的に業者が開発を行ってきた結果、業者の技術レベル、特に Geoserver を用いた GIS アプリケーションの開発技術については SD1 の頃よりも明らかに向上している。しかし最初から技術レベルの高い開発業者を選択できなかったのかという疑問が残る。SD1、SD2 共に開発業者は技術プロポーザルにより選定されたが、技術プロポーザルに書かれた内容が必ずしも実行された訳ではない。立派な技術プロポーザルを書くためのテンプレートが存在していることも事実であり、技術プロポーザルのみで優秀な業者を選定するのは困難である。業者が作成した稼働中の類似システムを確認するのが最も良い方法と思われるが、途上国ではそのような業者が存在するか否かが問題になる。また、仮に存在しても競争入札に付されるのであれば、技術的に満足できる業者が選定されるとは限らない。今後類似案件が行われる場合は、開発業者の技術レベル、使用するソリューション、国外業者の利用の必要性について十分な事前調査が必要であろう。

② 　　　JICA 単年度予算による開発期間の制限

　SD1，SD2 で行った業者選定のスケジュールに従った場合、システム開発後の研修期間を減じると、実質開発に掛けることのできる時間は３－４ヵ月となる。この期間は MKFFIS／GFIS の規模のシステム開発には必ずしも十分とは言えない。SD2 で実用に耐えうるシステムが構築できたのは、保守期間中にバグフィックス以外に機能追加をも請け負うというマケドニアのある意味おおらかなシステム開発の慣習に依る所が大きい。

③ 　　　科学的なアプリケーション作成の限界

　一例として FWI 地図の作成を挙げることができる。例えば、ヨーロッパ地域の FWI 地図を公表している EFFIS のデータソースには欠測値は存在せず、FWI の計算は教科書通りに行うことができるため非常に簡単である。一方マケドニアの場合、欠測値の存在という特別な事情がある場合の FWI の計算方法について記載された論文を見つけることができなかったため、独自の手法を考案する必要があった。しかし、開発業者には発注仕様を固めてからでなければ委託できないため、マケドニアでは FWI 計算を開発業者に委託することができない筈であった。結局 SD1 で業者が作成した FWI モジュールは使い物にならず、担当コンサルタントが試行錯誤を行いながら書きなおした。このような多少の研究を要するモジュールの開発は本来大学などの研究機関と共同で行うべきである。

④　　　共同企業体の問題点

　MKFFIS／GFIS の開発には大きくネットワーク、データベース、GIS の３つの技術が必要であった。採用した開発業者は３社の共同企業体であり、それぞれが得意分野を受け持っていた。共同企業体は得意分野が加算されるという利点があるが、一方それぞれの担当分野の境界部分について責任があやふやになるという欠点があり、開発管理の障害になる。業者のリソースが限られやむを得ない場合を除いて、共同企業体の活用は避けるほうが無難であろう。

３．２　GIS データ品質向上

① 　データ編集権限

　PEMF における QGIS トレーニングは、先方の意向から全てのエンジニアを対象として実施してきた。昨年及び本年の研修を実施した結果、全てのエンジニアが GIS という新たな概念をある程度理解し、基礎的なレベルの編集作業は行えるようになった。一方で、精度の高いデータを責任もって実施できるレベルにまでは至っていない。最終的には PEMF が管理体制を決めるべきだが、全エンジニアにデータ編集作業権限を与えるのではなく、ある程度コアなメンバーがデータ編集担当者となることで品質を保持できると考えられるため管理体制を再検討する必要がある。

② 　データ品質管理

　各エンジニアが担当 FMU(Forest Management Unit)のデータ品質にまずは責任を持つ。その後、地図作成担当、アドミニストレーターがデータ品質管理手順書に沿って検査を行い、合格したファイルのみシステムにアップロードされる。2014 年 2 月現在、業者によりデータアップロード機能が開発中であるため、データ仕様が明確にはなっていない。業者が定めるデータ仕様を順守するよう各品質管理者に周知徹底する必要がある。

③ 　新 FMU データの作成

　プロジェクトによるシステム開発中も通常業務が進行していた為、15FMU データセットは業者により作成された shpaefile ではなく、CAD データが最新情報を持っている。C/P と協議を重ねた結果、CAD データをコンバートするのではなく、既存の shapefile を加工することになった。コンバートする事を念頭に置きながら精度の高い CAD データを意識して編集を実施していれば shapefile にコンバートする事ができ、作業効率も高まった。通常業務を実施中のシステム開発の教訓と考えられる。

　また同様な理由で、現在システムで採用している座標系（WGS84_EPSG:4326）と異なる座標系(MGIBalkanZone7_EPSG:31277)を持つデータに対して編集作業を開始している。研修を通して変換方法は学んでいるが変換作業には慎重さが求められる。

④ 　バージョンの更新

　本プロジェクトではオープンソフトウェアである QGIS をデータ編集 GIS ソフトとして採用している。昨年まではバージョン 1.8.0 を使用していたが、2013 年 9 月に最新版 2.0 が公開された。一般的に新しいバージョンはバグなどができっていない為、導入には慎重になるべきであるが、2.0 は 1.8.0 に比べて大きな作業アドバンテージがあり、作業環境も非常に安定していることから C/P と協議した結果、導入を決定した。その結果新しいバージョンに慣れるためにある程度の時間を費やしたが、その価値はあったと考えられる。一方、限られた時間での検証であった為、今後予期せぬバグが発生する可能性も否めない。その際には部分的に 1.8.0 の適用可能性も含め検討する必要がある。

4　　　　上位目標の達成に向けての提言

　森林火災の予防・早期警戒に対する対応能力の向上により、大規模森林火災発生を抑制するには MKFFIS／GFIS システムの継続的な使用が必要である。しかし、MKFFIS／GFIS の主要な成果物である VDM とホットスポットは Modis に依存しており、本質的にこれらの地図の寿命は Modis のサービス期間で決定される。Modis については既に Terra が 14 年、Aqua が 12 年稼働しており、いつサービスが停止しても不思議ではない状況である。

　一方、もう一つの成果物である FWI 地図は衛星データに依存しておらず、さらに AWS が Synop でバックアップされているため、有人測候所さえ機能しておれば利用可能である。この状況を踏まえて以下の 2 点を提言する。

①　　　　CMC は、MKFFIS／GFIS 利用に掛かる法整備に際して FWI を主要判断基準として利用し、VDM とホットスポットは補助的な利用に留める。

②　　　　CMC は、Modis のサービス停止を想定して、Modis 以降の代替手段の研究を開始する必要がある。具体的には、EFFIS と連絡を密にして、最新情報の取得に務める。さらに、大学等の共同研究が可能な組織を探す事が重要である。

添付資料 1 専門家派遣実績

	担当業務	氏名	所属	格付	平成25年度												日数 合計	人・月 合計	
					4	5	6	7	8	9	10	11	12	1	2	3		現地	国内
現地作業	総括/システム改良 デザイン・開発管理	高津　宏幸	ワイ・エス・ケイ コンサルタンツ㈱	2	4/21 ▬▬▬ (75)			7/4		9/1 ▬▬▬▬▬▬▬▬▬▬▬ (180)					2/27		255	8.50	
	副総括/GISデータ 品質管理	森川　悠太	国際航業株式会社	4		5/13 ▬ (20)	6/1						1/13 ▬▬ (46)		2/27		66	2.20	
															現地作業 小計		321	10.70	
国内作業	総括/システム改良 デザイン・開発管理	高津　宏幸	ワイ・エス・ケイ コンサルタンツ㈱	2	4/5 ☐ (4)	4/8〜4/10 ☐		7/8〜7/10 ☐ (3)							3/3〜3/5 ☐ (3)		10		0.50
	副総括/GISデータ 品質管理	森川　悠太	国際航業株式会社	4	4/4〜4/5 ☐ (2)	4/8〜 ☐ (1) 5/10							1/9〜1/10 ☐ (2)		2/28 ☐ (1)		6		0.30
															国内作業 小計		16		0.80
報告書等					△ 業務実施 計画書								現地業務完 了報告書 △△△ 専門家業務 完了報告書 業務完了 報告書						

	現地	国内
	10.70	0.80
合計	11.50	

凡例：　▬▬▬▬▬　現地業務　　　☐☐☐☐　国内業務

添付資料 2　研修・セミナー実施実績

マケドニア旧ユーゴスラビア共和国

森林火災危機管理能力向上プロジェクト（システム改良）

QGIS 研修報告書

<div align="center">Contents</div>

1．研修概要

1.1 リフレッシュ研修
目的：研修終了時に参加者が QGIS 上で通常業務に必要な操作を習得すること。
内容：QGIS の基本操作、データ編集方法
使用ソフトウェア：Quantum GIS 1.8.0
期間：2014 年 1 月 24 日、25 日（2 日間）
参加者：12 人
参加者属性：PEMF（マケドニア森林公社）に属するエンジニア。
　　　　　　　基本的に 2012 年の研修以降 QGIS を利用していない人。

1.2 最終研修
目的：研修終了時に参加者が QGIS2.0 の基本操作を習得すると共に、データ品質管理手
　　　順を習得すること。
内容：QGIS2.0 の基本操作、データ品質管理手順、共通課題等
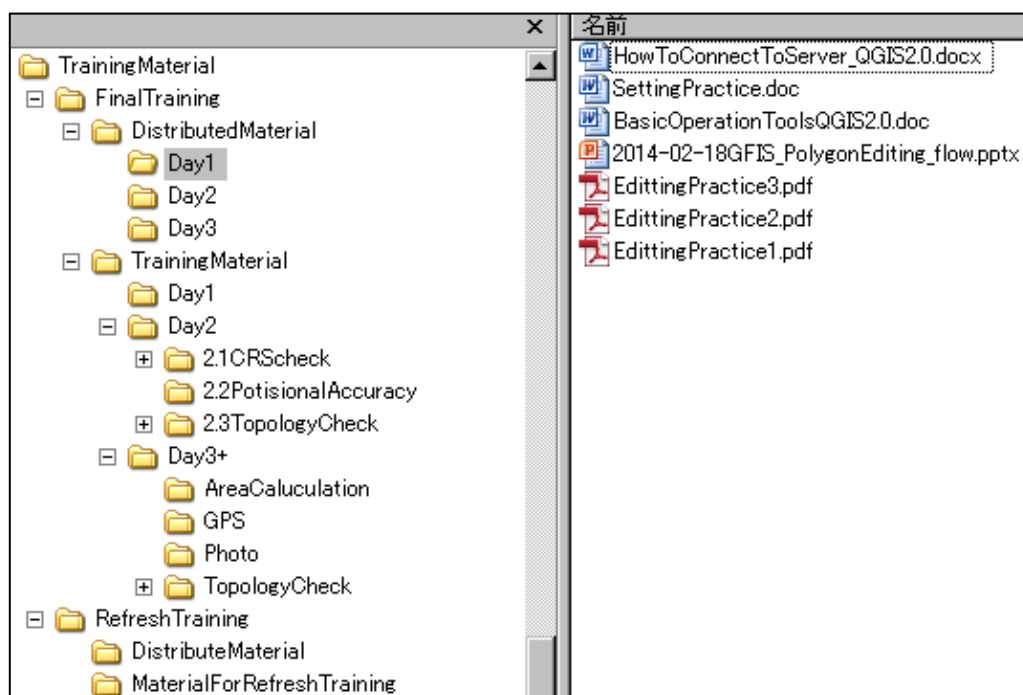ソフトウェア： Quantum GIS 2.0
期間：2014 年 2 月 18 日、19 日、 21 日（3 日間）
参加者：21 人
参加者属性：PEMF に属するエンジニア 19 人、地図作成担当 2 人

2．研修教材
プロジェクトに収めた研修で利用した教材、配布した資料一覧を下記に示す。

3. 研修教材サンプル

研修中に配られた教材のサンプルを下記に示す。
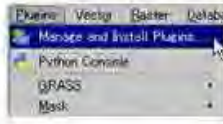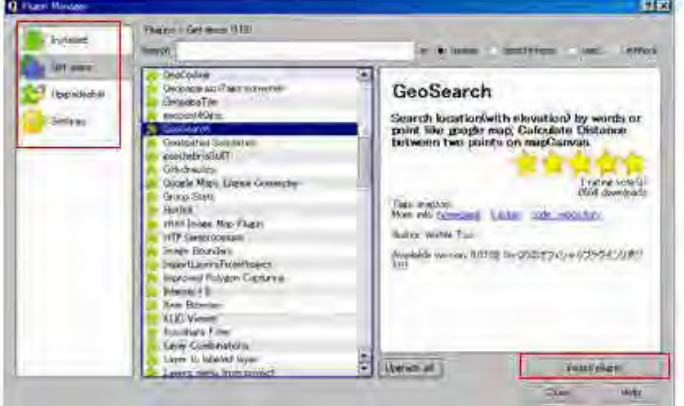
4．研修中に実施した練習問題サンプル

研修中に配られた練習問題のサンプルを下記に示す。
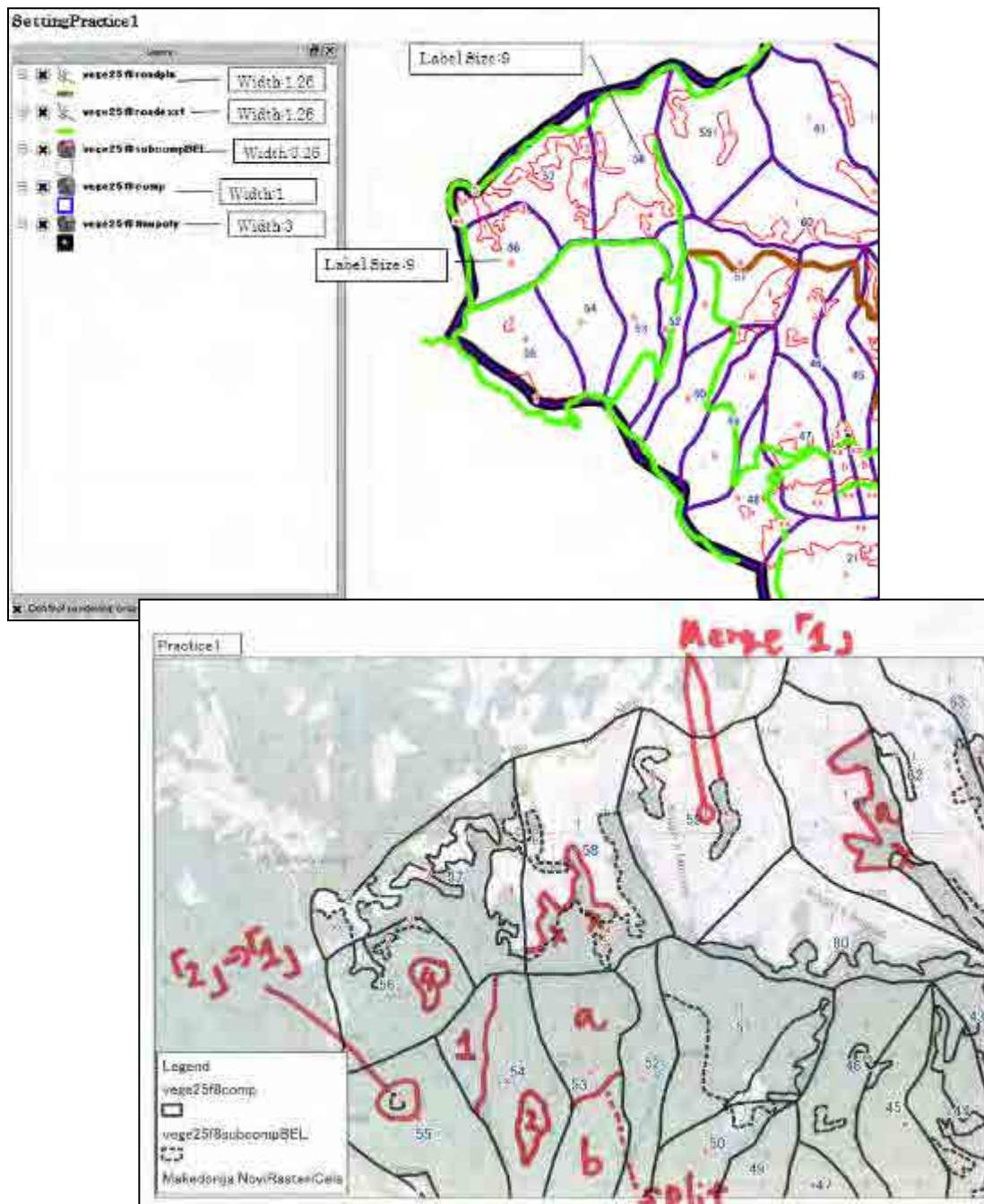
４．所感

　2012 年度に実施した研修を含めると、計 6 回 QGIS に関する研修が PEMF を対象に実施された。研修の達成具合、留意点、反省点等を所感として下記にまとめた。

【達成具合】

　約 20 人いる PEMF 職員のうち、QGIS 操作習熟度は大きく 3 つのグループにわけられる。一つ目は研修中であれば、基本的な編集作業は実施できるが、職場に戻り、自分たちだけで 1 から作業を行えるか疑わしいグループ。二つ目は時折不明点をサポートするスタッフがおり、マニュアルを確認しながらであれば通常業務は行えると思われるグループ。三つ目は高いデータ精度を維持しながら通常業務を行う事はもとより、面積計算など一部高度な操作も自分だけで実施可能なグループである。なお、人数の配分は 1 番目のグループから、5 人、5 人、10 人といった具合である。

【コアメンバー】

　3 つ目のグループに属するスタッフのうち、特に 5，6 名は GIS に関する知識も身についており、向上心も伺えることから今後 PEMF 内における GIS 業務のコアメンバーとして活躍することが期待される。

【実施体制】

　2012 年に実施した研修ではサポートメンバーとして CMC から 2 名招待した。一方、本年度に実施した最終研修では、あえて外の機関から人は呼ばず、研修中に不明点がでた際はお互いで問題解決していくよう研修実施体制に配慮した。必ずしもこれら実施体制が全ての要因ではないが、昨年度にはみられなかった知識の共有や相互に教え合う環境が確認された。

【持続可能性】

　GIS という全く新しい概念、システムを PEMF は昨年から導入したわけだが、既に通常業務で利用せざる得ない環境下にあり、技術習得に対する積極性は研修を通して感じることができた。先に述べた通り、全員が GIS に関する業務を責任もって行えるとは言い難いが、組織として実施していくだけの体制、技術、環境は整ったと考えられる。

【インパクト】

　GIS の利用としては、森林管理計画作りが主な目的であったが、研修に参加していた一部スタッフはハンティング部門に属しており、これまで紙ベースで管理していたハンティング情報を GIS で管理し始めた。プロジェクト開始当初は予期していなかったポジティブなインパクトであると考えられる。

<p style="text-align:center">添付資料</p>

A-1 リフレッシュ研修詳細

Scope & Target

The training is designed for GIS beginners. Training will be provided on the QGIS software tool and general GIS knowledge will be gained. The material will be selected from the actual GIS data which PEMF has to manage.

Objectives

The trainee at the end of the training are expected to do below task by themselves. Objectives focus on the regular operation. ✓ To modify existing polygon ✓ To modify attribute data ✓ To create new polygon After training, trainees try to modify data that you are responsible. First week of February, data inspection will be done.

Training Schedule

Contents of training	Time	
1. Downloading Data from the server 　　　Explain by Miro-san	Lecture (0.25h) Practice (0.25h)	
2. Basic Operation of QGIS 2.1　QGIS (Start-up, Add data and Save) 2.2　Basic Operation of QGIS Zooming in/out, Scrolling, Symbol, Transparency& Label 2.3　Attribute data 　　　Open data, Edit data and others <u>Practice Setting</u>	Lecture (0.5h) Practice (1h)	D A Y 1
3. Shape file modification 3.1　Shape change of polygon and polyline 　　　Snap and Topology function 3.2　Delete, Merge and Split 3.3　Consistency between Compartment and Sub-compartment <u>Practice Editing</u>	Lecture (0.5h) Practice (1h)	

4. Saving Shape file saving VS Map Saving	Lecture (0.5h) Practice (0.5h)	
5. New Polygon Creation	Practice (1h)	

6. Practice
Common troubles
   ◆ I cannot see a map feature which is supposed to be there
   ◆ I cannot grab (select) an object
   ◆ I want to remove the yellow color of some polygons.
   ◆ Others
Practice
	Review (1h)
	Practice (3h)
		D
		A
		Y
		2

A-2 最終研修詳細

Scope & Target

The training is designed for QGIS users. Training will be provided on the QGIS2.0 software tool and general GIS knowledge will be gained. The material will be selected from the actual GIS data which PEMF has to manage.

Objectives

The trainee at the end of the training are expected to do below task by themselves on QGIS2.0. Objectives focus on the regular operation.

✓ To modify existing polygon

✓ To modify attribute data

✓ To inspect data quality and modify errors

After training, trainee tries to modify data that they have a responsibility.

Training Schedule

Contents of training	Time	
1. New Flow of FMU/Damage polygon editing Explain by Kozu-san	Lecture (0.15h) Practice (0.15h)	

2. Basic Operation of *QGIS 2.0*
2.1 QGIS (Start-up, Add data and Save)
2.2 Basic Operation of QGIS
  Zooming in/out, Scrolling, Symbol, Transparency and Label Coloring.
2.3 Attribute data
  Open data, Edit data and others
Practice setting
	Lecture (0.5h)
	Practice (1h)	

3. Shape file modification on *QGIS2.0* 3.1 Shape change of polygon and polyline Snap and Topology function 3.2 Delete, Merge, Split and Donut polygon 3.3 Connect to the server Practice editing	Lecture (0.5h) Practice (1h)	D A Y 1
4. Data inspection 4.1 CRS (Coordinate Reference System) 4.2 Plug-in	Lecture (1h) Practice (1h)	 D

4.3 Data Quality Evaluation Procedure 4.4 Topology Check 4.5 Modification topology errors <u>Practice Data Quality Evaluation</u>		A Y 2
5. Common Trouble and Effective operation ◆ Area calculation ◆ Picture on the map(Photo2Shape) ◆ Open project in QGIS2.0 not 1.8 ◆ Bookmark ◆ Color style saves ◆ Label Setting ◆ GPS data transfer ◆ Join Table ◆ Missing Toolbar ◆ Others	Review (1h) Practice (3h)	D A Y 3

A-3 写真

OJT

講師による説明

個別指導

研修生同士で教えあう

研修教室

証明書

添付資料３ FAQ

Technical Assistance for Development of Integrated System for Prevention and Early Warning of Forest Fires

25 Feb 2014

F A Q
Frequently Asked Questions

~ QGIS @ PEMF ~

Setting

➢ <u>Can I print out A0 size?</u>

Step1: Open "Print Composer"

Step2: Right click on the right side of print composer screen and check "Composition"
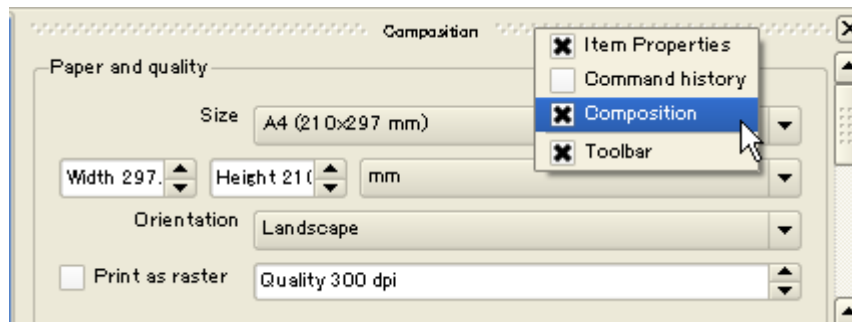
Step3: Change the size of paper
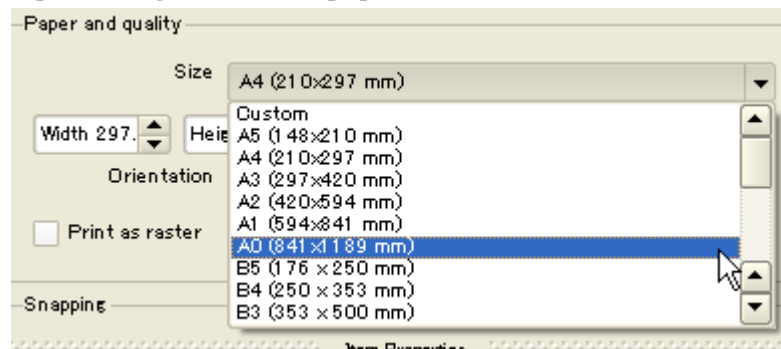
Step4: Create map in the usual procedure

Step5: Set Page A0 from "Page Setup"

Step6: Print out!!

➢ <u>How do I cover lower layer between the dot (dash) lines of upper layer?</u>

Issue: Below line (Sub compartment in here) should be not describe between dot lines of compartment.

Compartment: Red line

Sub-Compartment: Blue line

Step1: Add symbol layer form the "Symbol properties"

Step2: Click "Move down"

Step3: Change setting by referring to the below figure

　　　　※Border width should be the same of the upper symbol layer.
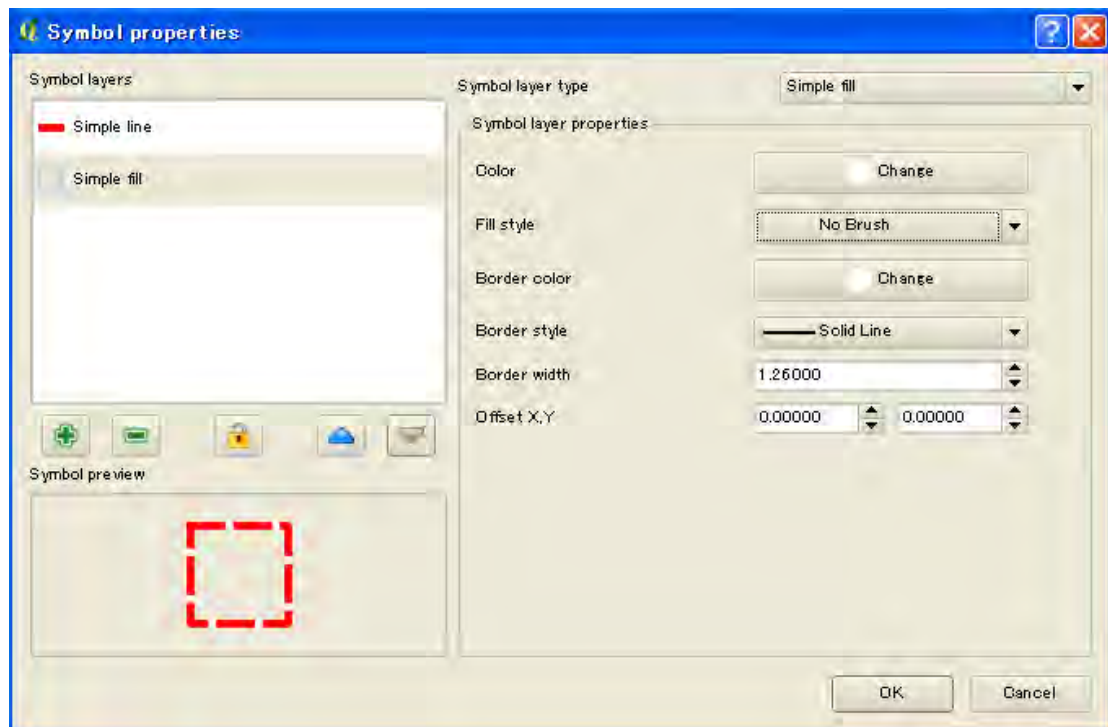
Step4: Click "OK" and confirm result

> ➢ <u>How do I set black and white color to the raster data?</u>

Issue: Topographic map should be described black and white color.
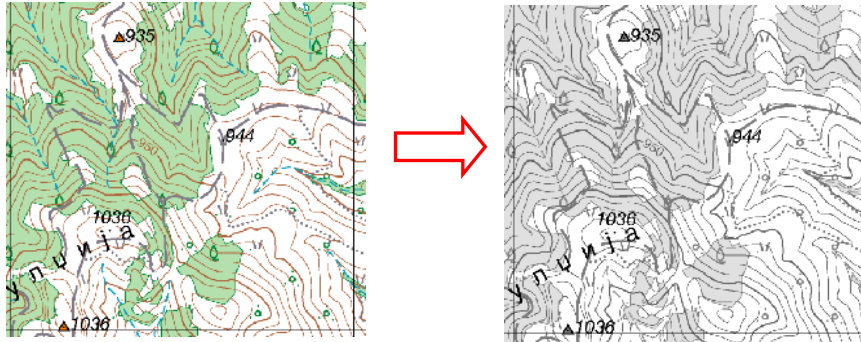
Step1: Open property of target raster data

Step2: Select "Style" tab

Step3: Change "Render as" from "Three band color" to "Single band gray"

Step4: Confirm result

Additional Step: Adjust color description from "band properties" and others.

➢ How do I put a different color for the forest and non-forest?

Step1: Select only non-forest feature of Sub-compartment

Select non-forest feature with "Advanced search"

This is just example. You can select data with your style

Step2: Create new shape file by "Save selection as"

Right click target polygon and select "Save selection as" and save data

Step3: Add saved data on the map

Step4: Set different color for each polygon

※ Non-forest polygon must be put upper layer in this example.

> Can I put a label inside a feature?

Issue: Some label's position are outside of feature.
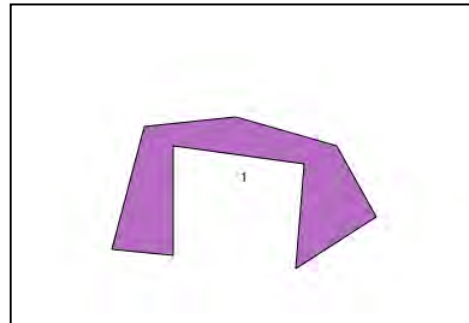
Step1: Install "EasyCustomLabeling" as "Plug-in" with reference to the "Reference_Plugin"

Step2: Check "EasyCustomLabeling" from "Plugin manager"
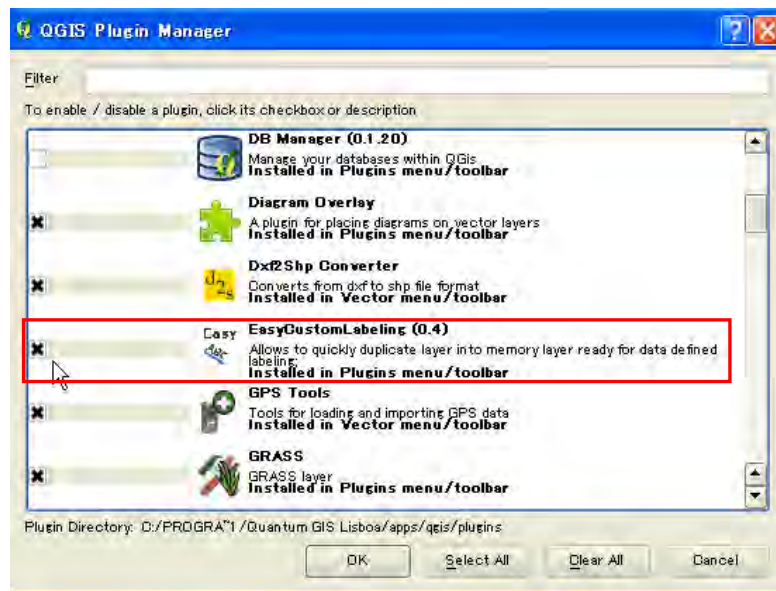
Step3: Select target layer
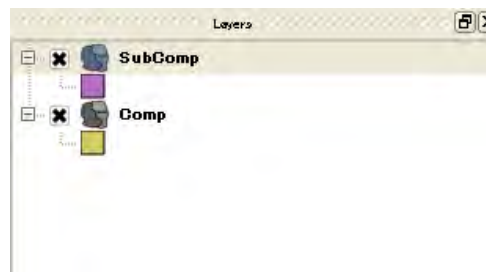
Step4: Click "Generates centroid layer for custom labeling tool " and set proper CRS

Step5: Confirm result
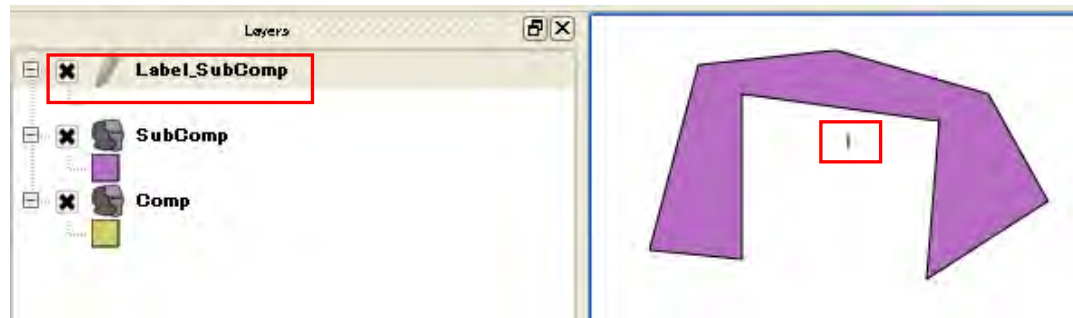
Step6: Select "move label" and move label on the map
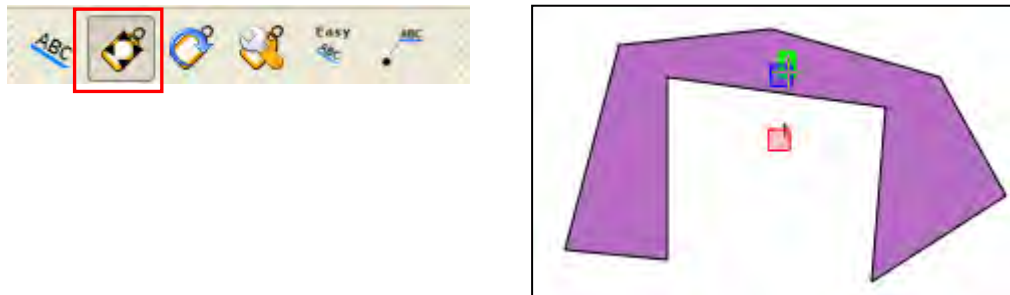
Step7: Add plug-in (Memory Layer Server 2.1 or 3.0)

The label which was created above steps is temporary file. You can save even this temporary file on the project file with this plug-in.

You can confirm if this data is temporary or not from Metadata
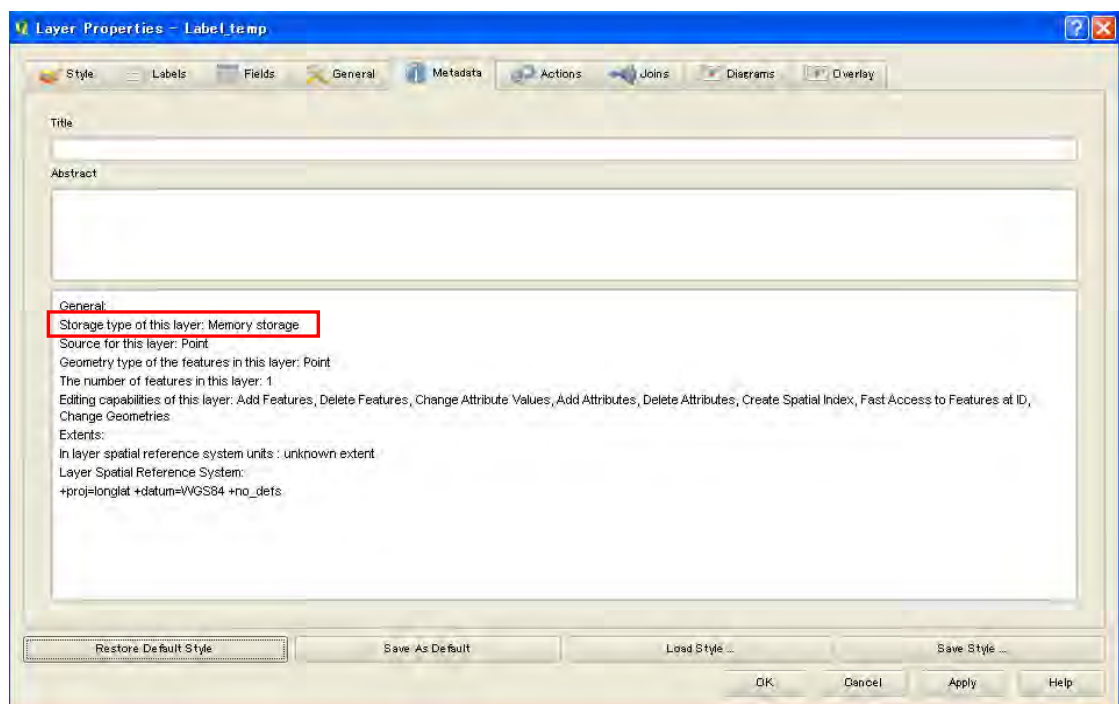
Step8: Click "Memory Layer Server"

    After editing label place and size, click "Memory Layer Server" from Plug-in
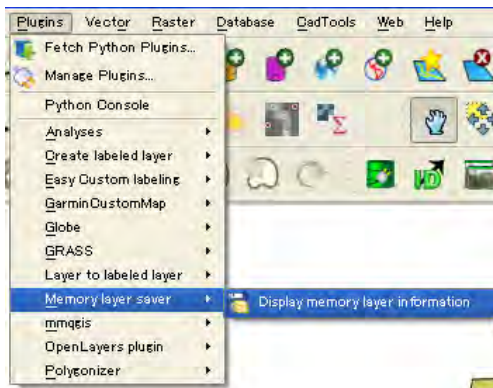
You can confirm additional files in the folder which project file is located.
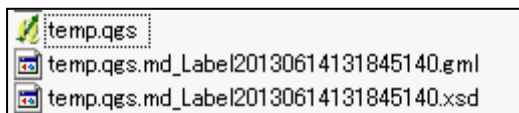
Point!!

➢ Different layer

    EasyCustomLabeling create new layer as label. This layer is saved on the map temporary. If it is necessary to save eternally, save layer from "save as"

➢ Change label style

    You can change the label style, position and etc from "Change label" and "Rotate label"
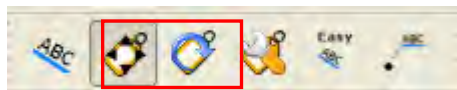
➢ Add arrow

    You can add the arrows between label and centroid feature.

Editing

➢ <u>Can I delete part of feature?</u>

Issue: There are overlapped feature in the same layer. Although I try to delete overlapped feature as normal way, I could not delete part.
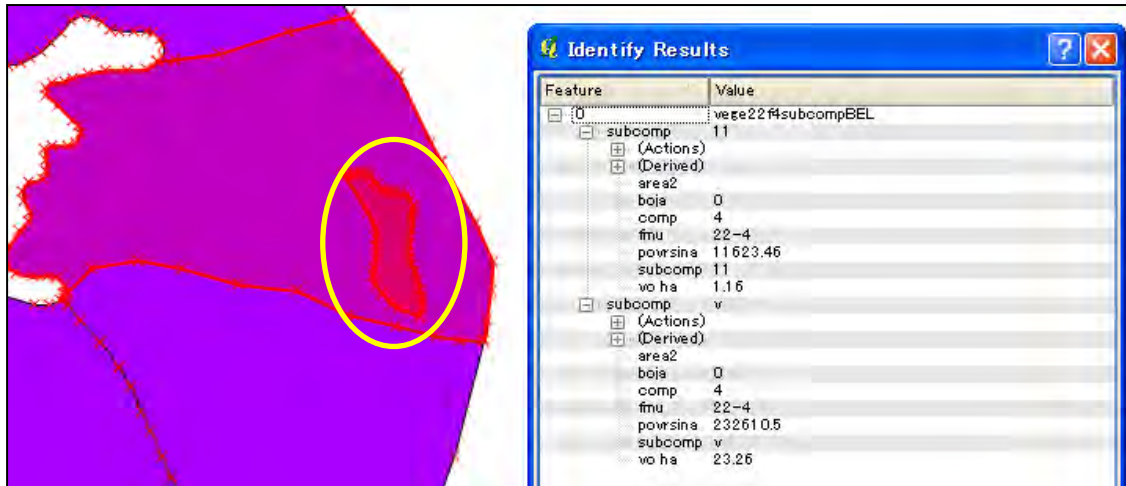
Step1: Select target feature
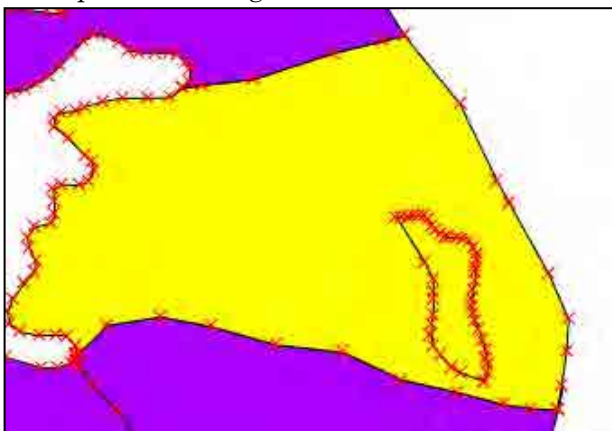
Step2: Move target feature
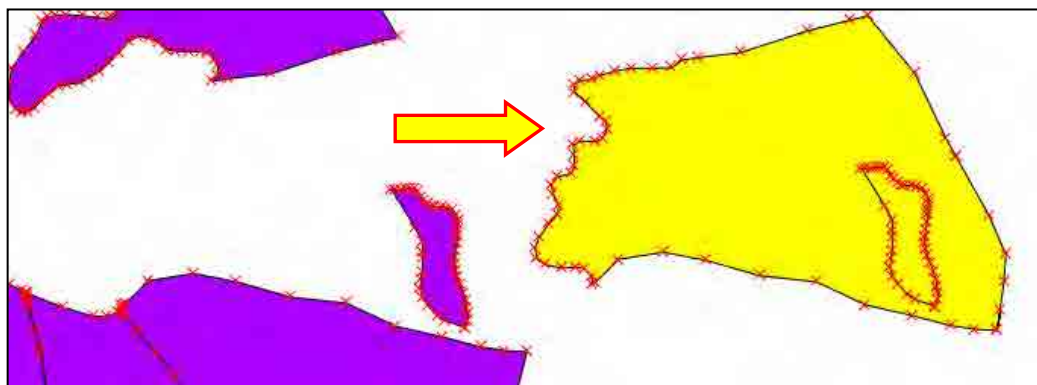
Step3: Select "Delete part" and click on the target feature
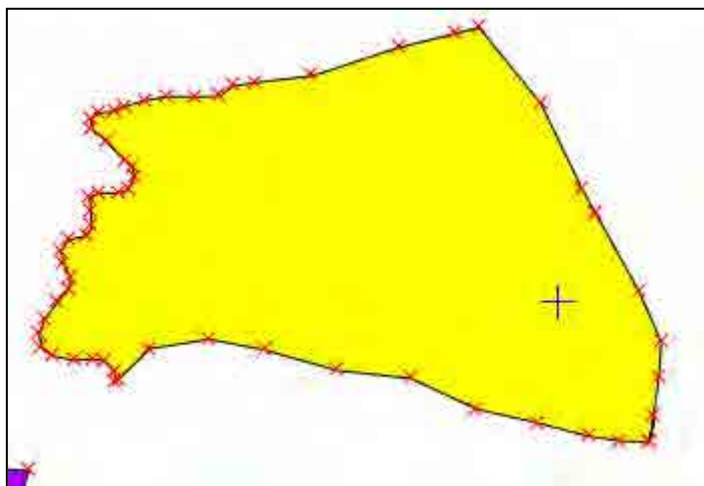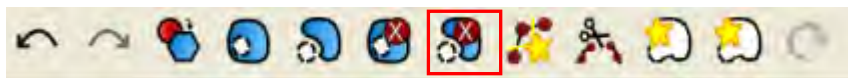
➢ <u>Part of feature still exists····.</u>

Issue: Two features must be the one feature, though there is a border line. I tried to delete part with following the above-mentioned instruction. The part of feature still exists.
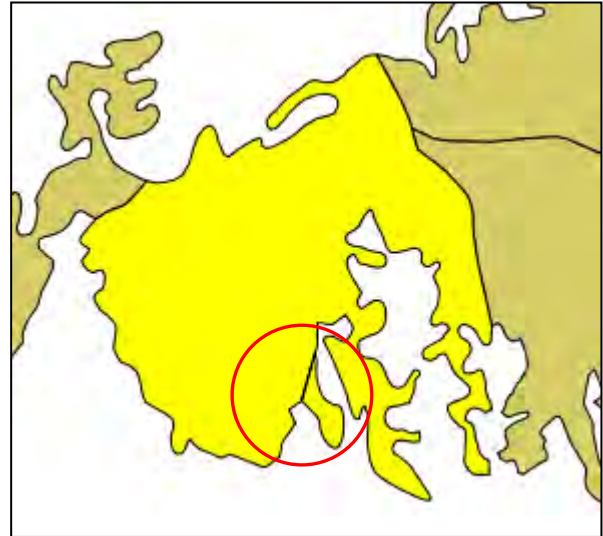
There are two ways to solve this issue.

① Buffer

Step1: Select "Buffer"
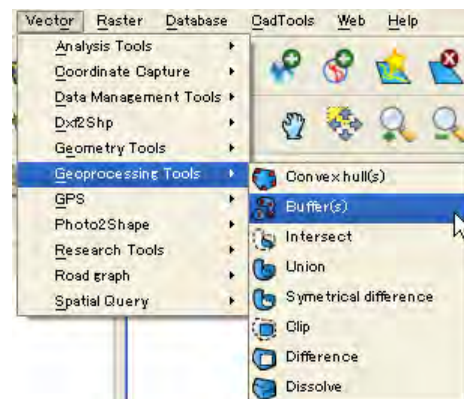
Step2: Create new polygon by buffer function with setting "0" as buffer distance.
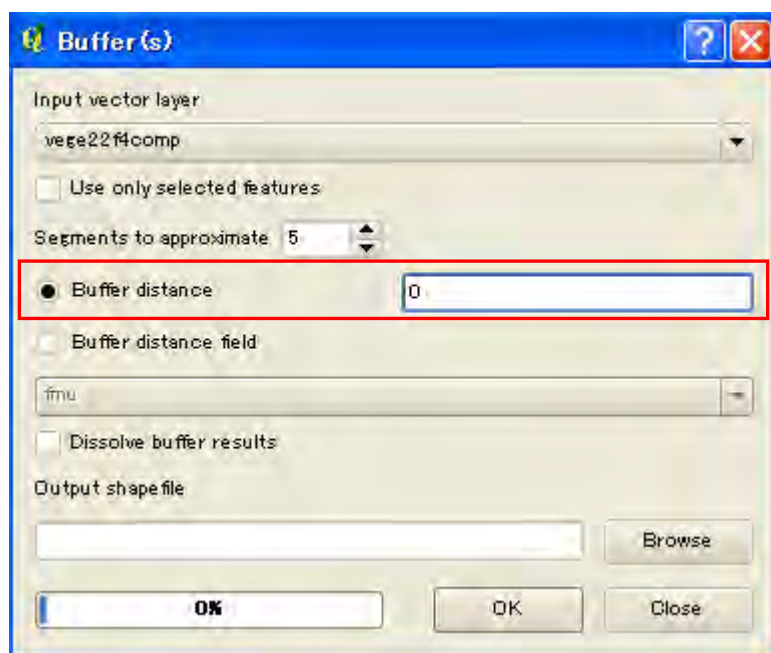
Step3: Confirm new polygon
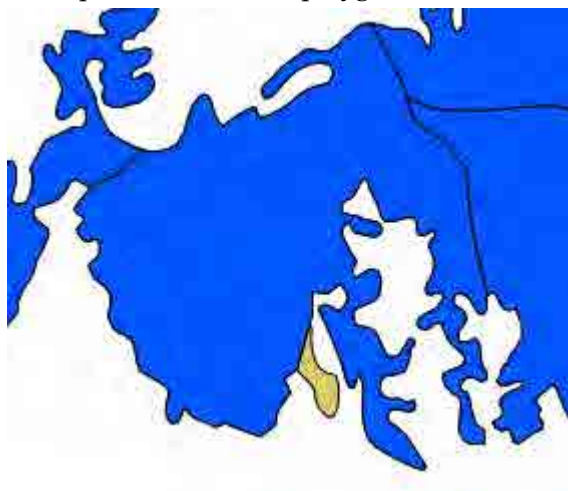
Blue: Buffered polygon

Brown: Existed polygon

② Merge shape files to one(if there is an original file before editing)

Step1: Add original polygon and delete features except target feature
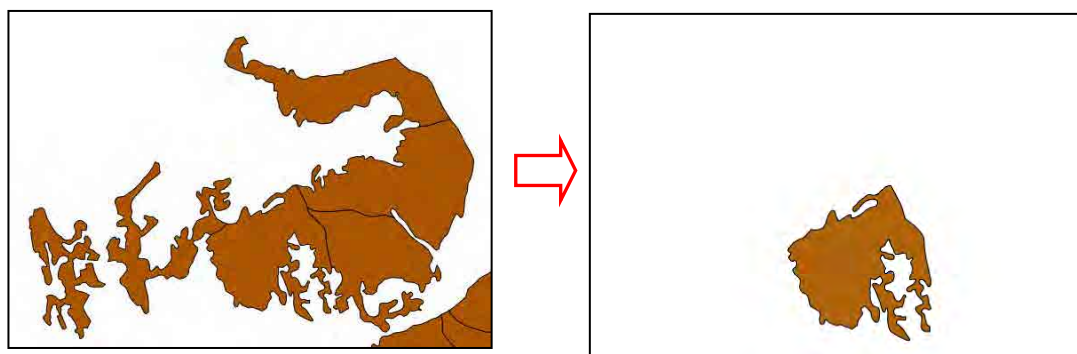
Step2: Delete target feature of edited polygon
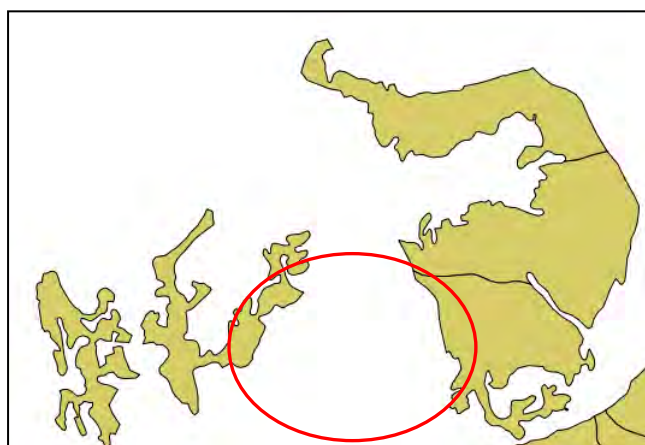
Step3: Select "Merge shapefiles to one"
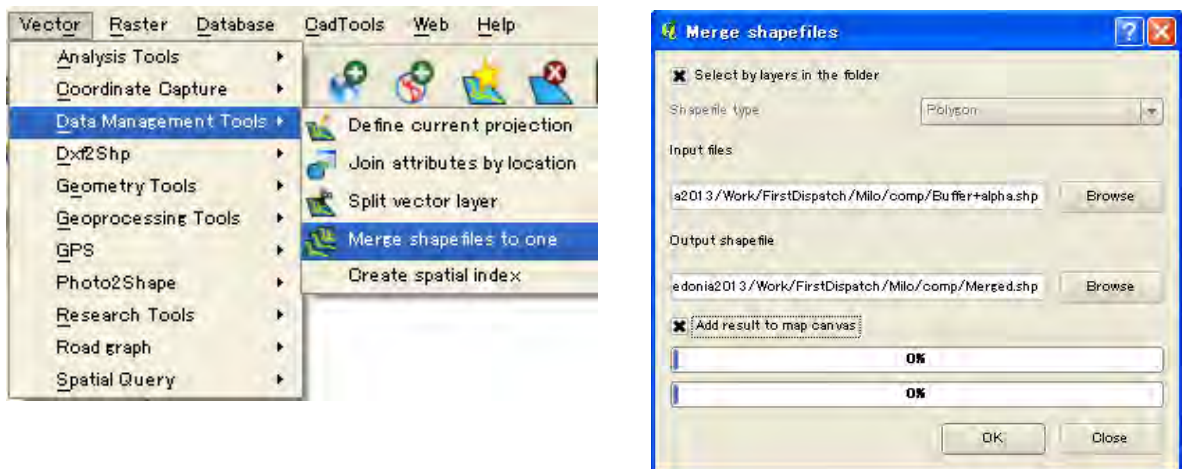
Step4: Confirm merged file and use this file.
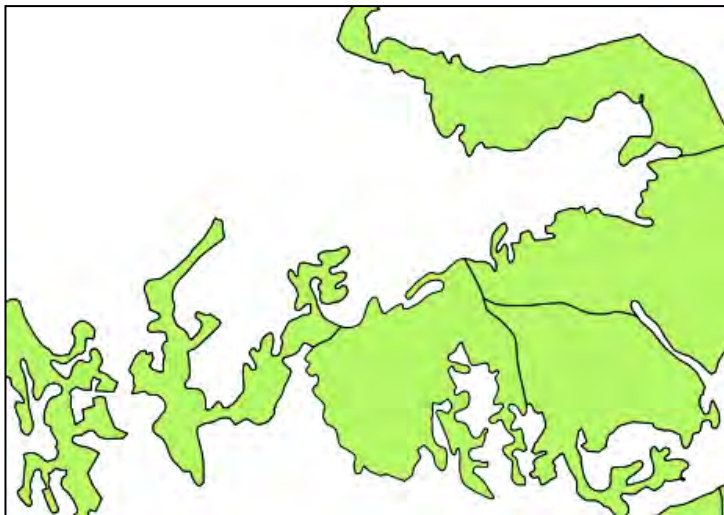
➢ How do I select a behind feature?

Issue: I can not select behind overlapped feature.
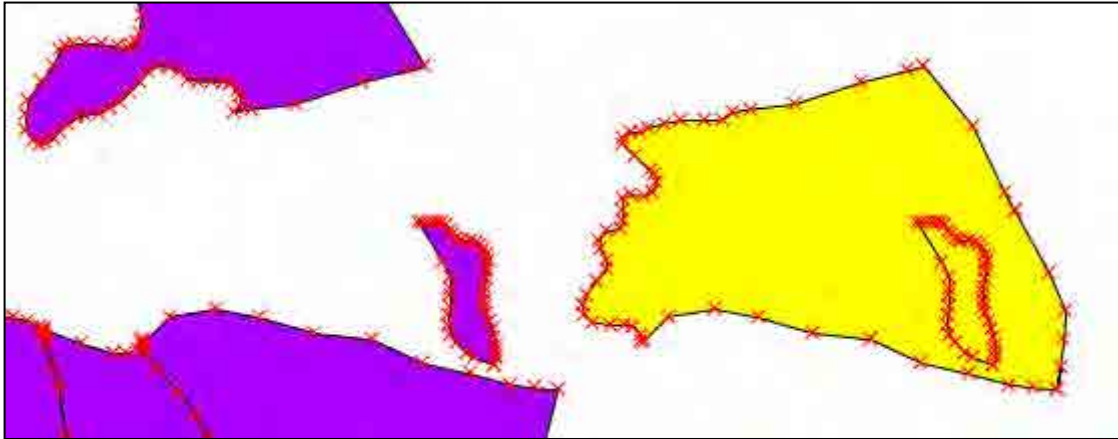
I can select only upper feature.

Step1: Check value of each feature from "Identify Features"

Step2: Select target feature from attribute table

Step3: Move target feature by "Move Feature"
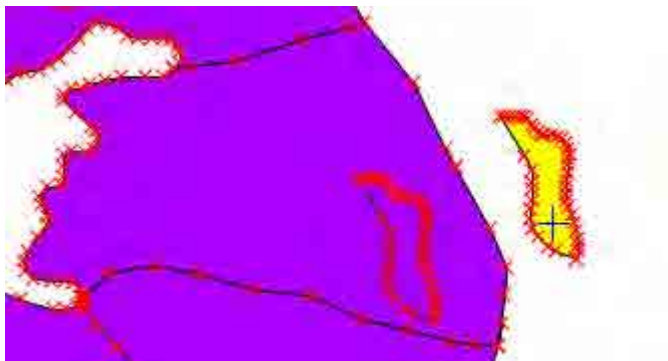
Point!!

As far as MORIKAWA know, you can not use snapping function by feature. Snapping function works only node.

➢ Can I change the order of column in attribute table?

Issue: I want to change the order of column. "fmu" must be put at the far right in this example.

Step1: Create new column (fmu)

Step2: Update existing field "fmu2" and select "fmu" from "Field Calculator"

Step3: Delete old column, "fmu" in this example.

Step4: Confirm result

Point!!

How to change the column name.

① Open *.dbf file on EXCEL.

② Change the name

③ Save file

④ Add shape file and confirm differences.

　※Copy target file before editing ,just in case.

➢ How do I divide a road polyline by the each feature of compartment

Issue: Road polyline must be divided in each compartment.
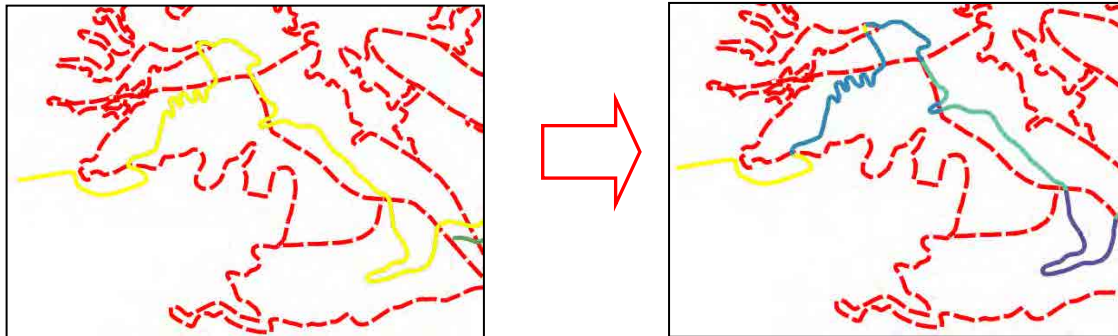
Step1: Select "Intersect"
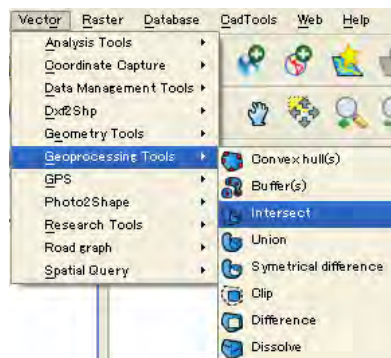
Step1: Set each setting refer to right figure.
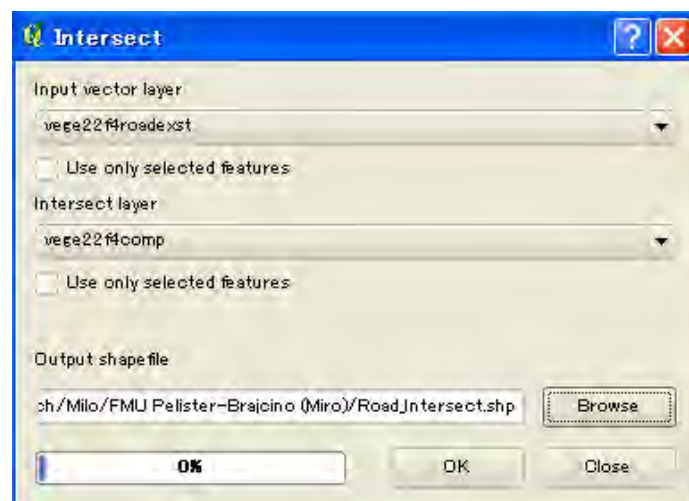
Step3: Confirm result (Add new vector)

➢ Can I use the same setting of "Print Composer"?

Issue: I have to recreate map every time, though I wish I could use saved map not only temperate but also data itself.
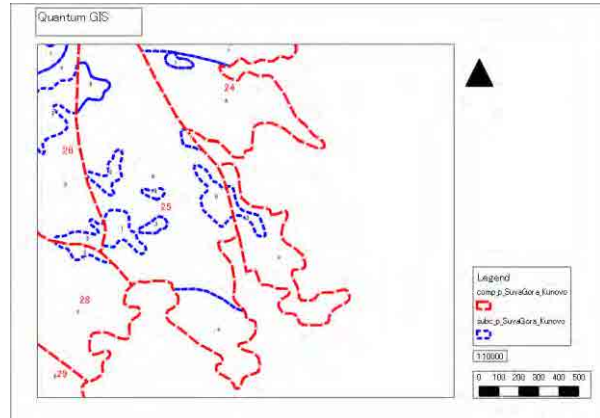
Confirmation : You can use template for another map.
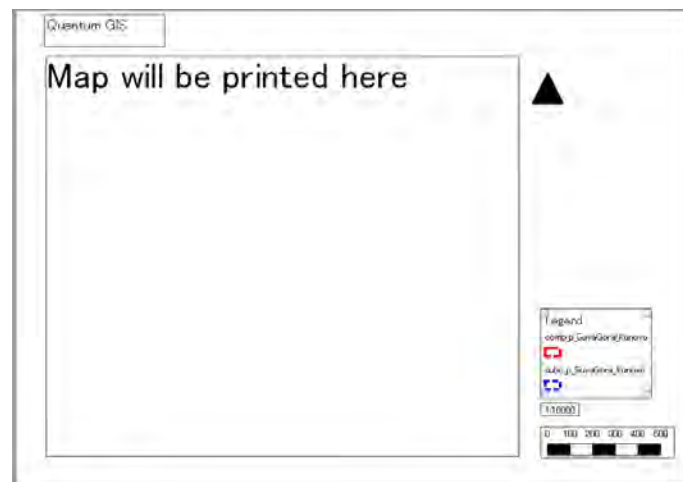
Step: Click "Composer Manager" and select existing composer and click "show".
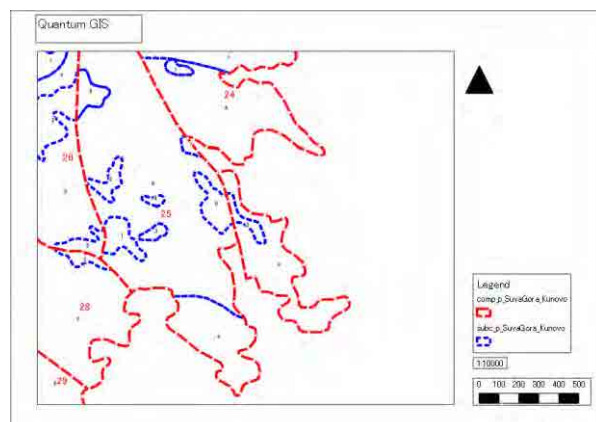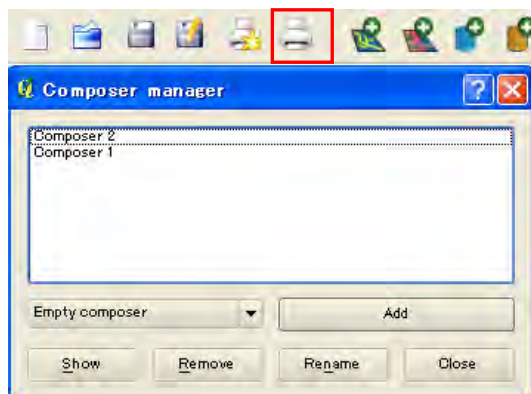
Analysing

➢ How do I calculate area of polygon?

Issue　: I calculated area with the attribute function. But, the area is very small.

Reason　:CRS of polygon is WGS84_Lat/Long(EPSG:4326). You have to convert shape file to the UTM34 (EPSG:32634), for example.

> ※Any CRS is usefule if it is a "Projected Cordcate System" not "Geographic Coordinate System".

Step1:Right click on the target shape file in the layers.

Step2:Click "Save as"

※
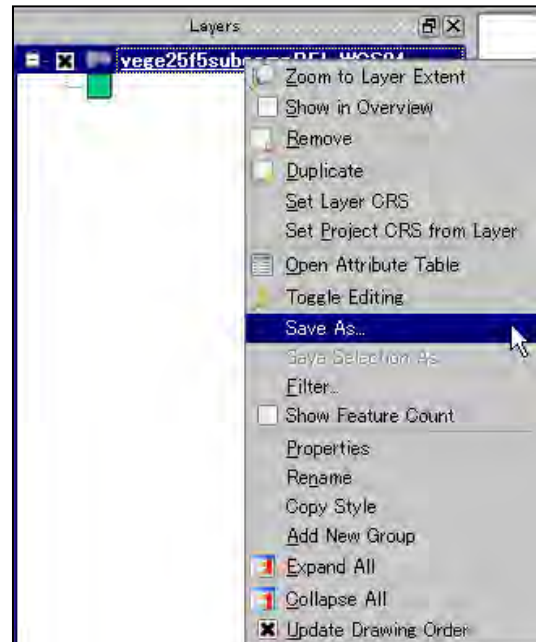
CRS changing from the property is just working on the current project file.

You have to create new shape file, if you need it with new CRS.
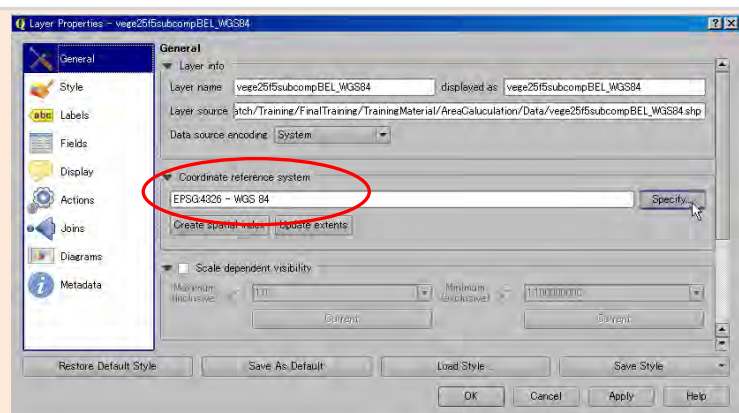
Step3:Select proper CRS from the "Browse".

※Check "Add saved file to map"
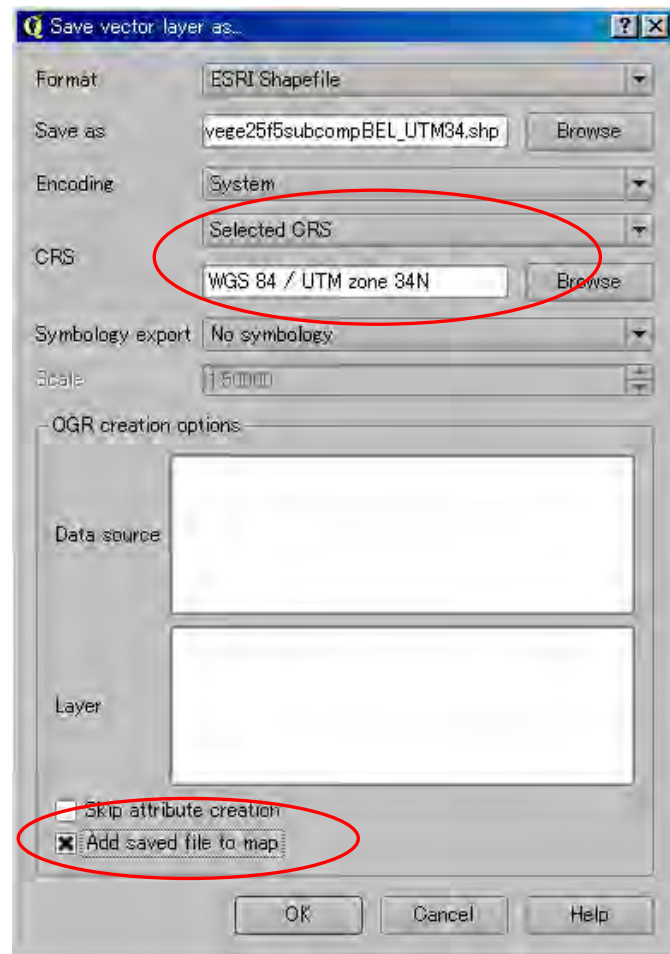
Step5:Open attribute table and star editing.

Step6:Click "Open filed Calculator"

Step6:Check "Create a new field" and type proper name of field

Select "Decimal number(real)" and put "2" at precision.

Click "$area" from Geometry.

Confirm result!!

GPS

➢ Can I see the map on the GPS

Step1a: Select "GarminCustomMap" from the "QGIS Python Plug-in installer"
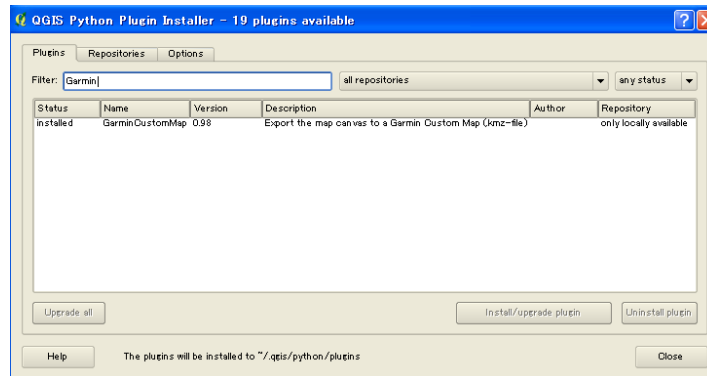
Step1b: Download plug-in package from below URL refer to reference "what is plug-in?"

http://plugins.qgis.org/plugins/plugins.xml

Step2: Create the map on QGIS
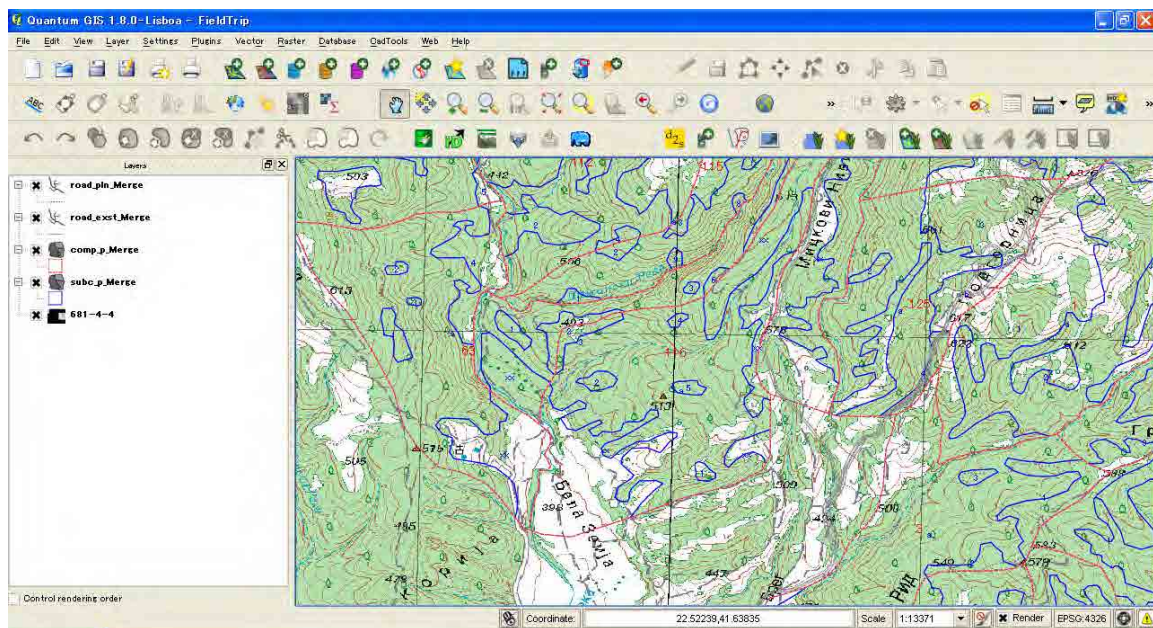
Coordinate Reference System have to be set WGS84 for using GPS with WGS84.

When CRS of data is bessel841, it have to be converted to WGS84 refer to "03.ShpCreation_2013_3.4 Shape file to KML (Google Earth)"

Step3: Start "GarminCustomMap"
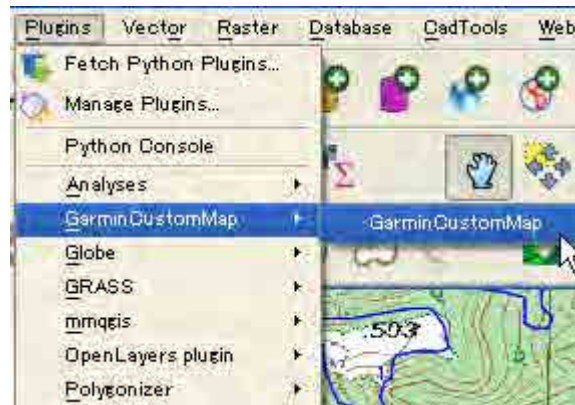
Step4: Save the file as KMZ
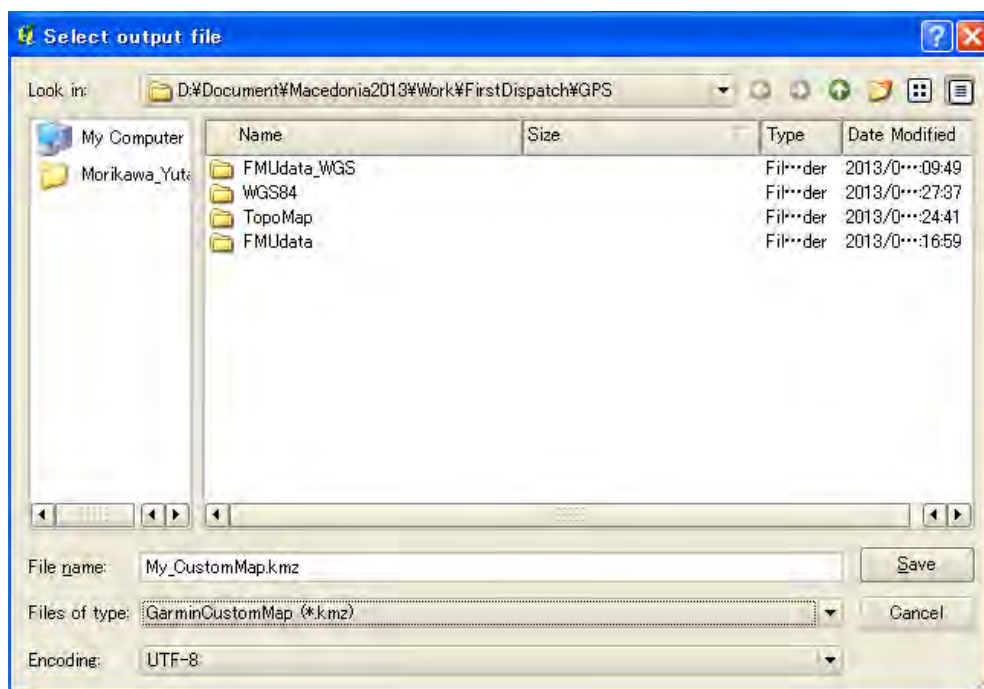
Step5: Put the file on the folder "Garmin/CustomMaps"
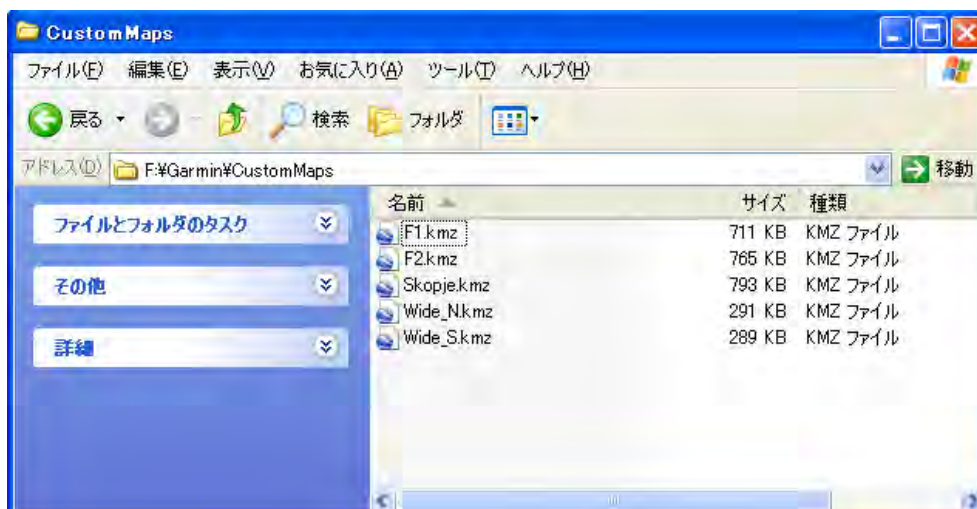
Step6: Confirm result on GPS

Step7: Better to check the present location (Skopje)

Each file is limited to **1 megapixel** (e.g. 1024 x 1024 pixel or 2048 x 512 pixel).

The time for drawing the map on your GPS unit is affected by the file size.

The number of Custom Map files on a GPS unit is limited to max100.

Reference_Plugin

➤ What is Plug-in?

QGIS has been designed with a plugin architecture. This allows many new features/functions to be easily added to the application. Many of the features in QGIS are actually implemented as either core or external plugins.

・Core Plugins

These are maintained by the QGIS Development Team and are automatically part of every QGIS distribution. They are written in one of two languages: C++ or Python. More information about core plugins are provided in Section Using QGIS Core Plugins

・External Plugins

These are currently all written in Python. They are stored in external repositories and maintained by the individual authors. They can be added to QGIS using the Python Plugin Installer. More information about external plugins is provided in Section Loading an external QGIS Plugin.

➢ How to use Plug–in?

①Core plug-in

Step 1: Open Plug-in Manager

Click "Plugins" and "Manage Plug-ins"
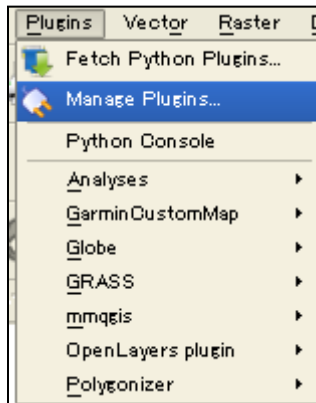
Step2: check plug-in

To enable a particular plug-in, click on the checkbox to the left of the plug-in name, and click OK. When you exit the application, a list of loaded plug-in is retained, and the next time you run QGIS these plug-in are automatically loaded.

② External Plug-in

There are two ways to install new plug-in.

QGIS1.8.0

1. Using "Fetch python plug-in"

Click "Plug-in" >Click "Fetch python plug-in"

>Choose plug-in from the list

To install a plug-in, select it from the list and click the Install plug-in button.

You can install new plugin from the list.
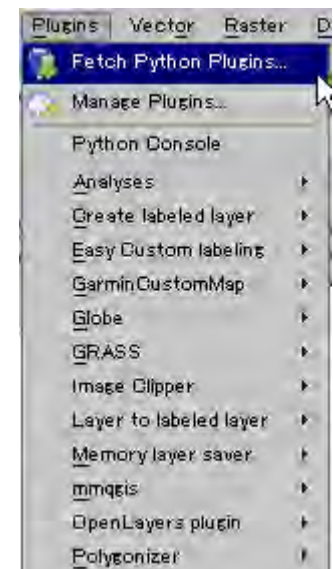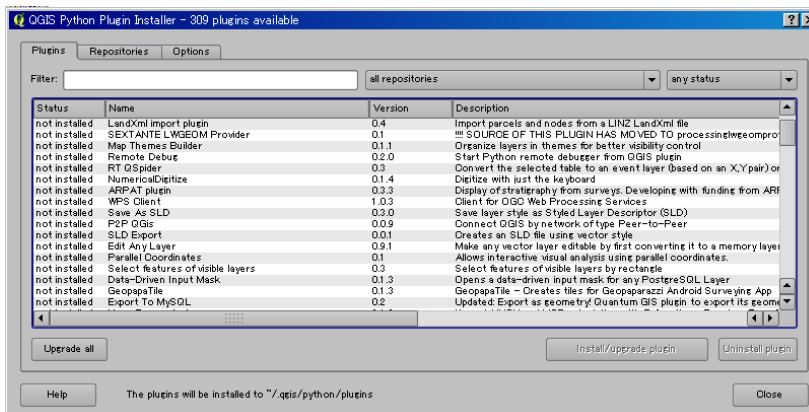
QGIS2.0.0

1. Click "Plug-in"

>Click "Manage and Install Plugins"

>Choose plug-in from the list

To install a plug-in, select it from the list and click the "Installed" tab.

From the "Get more" tab, you can get new plugin.
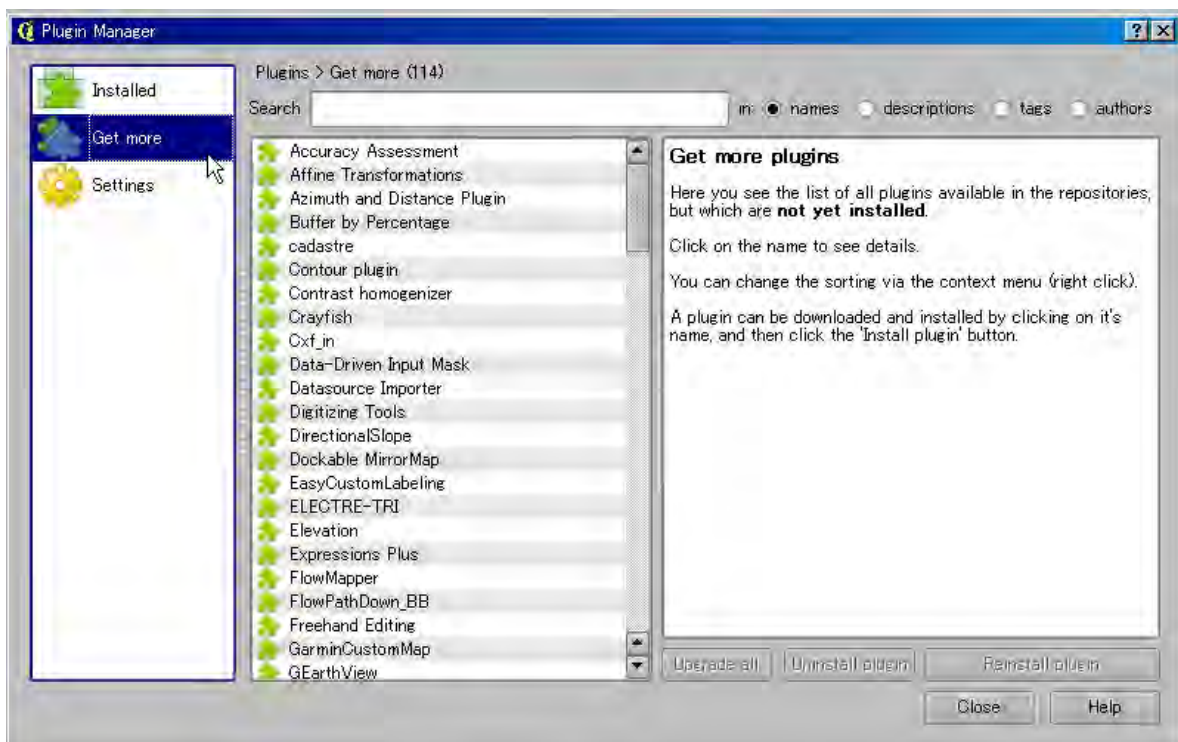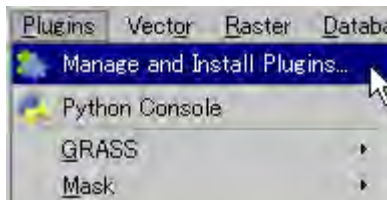
2. Get file from any site and put downloaded folder in the below folder.

QGIS1.8: C:\Program Files\Quantum GIS Lisboa\apps\qgis\python\plugins

QGIS2.0: C:\Program Files\Quantum GIS Dufour\apps\qgis\python\plugins

site: http://plugins.qgis.org/plugins/

http://pyqgis.org/repo/contributed

etc

添付資料４ 進捗報告書

Note taker: Ljupco Tagasovski

Attendees:
   Eisho Sato, Honda Yasuyo, Hiroyuki Kozu – **JICA**
   Stevko Stefanoski, Igorce Karafilovski – **CMC**
   Ljupcho Tagasovski – **EDUSOFT**
   Predrag Radojicic, Anastas Ristevski - **SIMT**
   Igor Mazganski, Vasko Bozov - **TRINITY**

	Agenda topics	Topic Mediator
1	Introductory, Initial meeting	- JICA
2	Other Project program activities	- Open

	JICA SD2 Project for Improvement of
MINUTES	**Integrated System for Prevention and Early Warning of Forest Fires**
	Steering Committee Meeting
	held on September 3ᵗʰ, 2013 at 2 p.m. in CMC HQ meeting room

Agenda topic:	**Review of weekly activities**	**- JICA**

Discussion:

This Introductory and first initial, kick-off meeting was chaired and opened by Mr. Sato.

Ms. Honda described and reconfirmed how the newly introduced project will officially conduct Operational matters:

- Communication between involved parties:
  - o main/general lesion will be between Mr. Tagasovski and Mr. Sato, and sometimes for some admin coordination between Mr. Tagasovski and Mr. Koneski;
  - o operational/topic specific communication will be directly between involved relevant parties with mandatory **Cc**: Sato, Honda, Kozu, Koneski, Stefanoski, Karafilovski, and Tagasovski;
  - o All e-mails should be answered as soon as possible, with at least by promptly acknowledge its reception.
  - o Prompt informing/emailing each time when new versions or new stuff will be uploaded.
- Regular Committee meetings will be held every working Friday at 10am in JICA/CMC office
- Reporting:
  - o Weekly Progress Reports to be in the same format as the one in SD1, and delivered to JICA 2 days before the Committee meetings. For example, for a regular Friday's meeting, the Weekly Progress Report must be submitted to JICA by 4p.m on Wednesday;
  - o Minutes from the Committee meetings will be in the same format as ones in SD1, and tentatively delivered one working day after the meeting.
- Deadlines:
  - o End of December is the firm deadline which MUST be met. It means all the precursor activities and working versions must be installed, tested and commissioned way before, so that in December the final-final Operational Acceptance is completely signed off.
  - o Training will HAVE to be conducted as planned in January 2014. The signed Contract specifically determine the obligations regarding user trainings, but generally Contractor will provide trainers and training materials while the Purchaser/User will provide training venue and logistics.

Mr. Kozu then described the Technical matters:

- o There will be two virtual environments established especially dedicated for software development and testing. Only finally tested software and approved by Purchaser/User can be moved and introduced in live working environment. Mr. Karafilovski from CMC will coordinate this and by Friday, September 6th, will report availability of the testing environments;
- o Some of the modules listed in the Functional Requirements shall be developed by Mr. Kozu. He will be responsible for the complete development circle including testing and operational acceptance and documenting (test reports, tech documentation and manuals). Once Mr. Kozu will commence these modules he will instruct and handover the maintains and warranty to SIMT and Trinity accordingly which will be notified also in the SDD.

This conclusion also will apply to those modules Mr. Kozu and Mr. Sawada have developed for SD1;

o Elaborated and more detailed by Mr. Kozu were all the items/modules listed in the topic "*4. Application Improvement Requirements*" of the signed Contract. For each item there was discussion and clarifications. At the end agreed was that there is a immanent need of having joint meeting with PEMF as soon as possible. Suggested was to arrange tentative meeting with PEMF on Friday, September 6th, in 10am in JICA/CMC premises. On that meeting SIMT and Trinity will come with already formulated precise questions for PEMF.

Agenda topic:	Other Project program activities	- **all**

At the end of the meeting Mr. Sato and Ms. Honda asked about the status of finalization of SD1 deliverables. SIMT reported that they have just installed new version with fixed bugs, and the relevant documentation and CDs will be accordingly updated and moved in FTP site for Purchaser review by the end of Wednesday, September 4th. However, some portions which are joint stuff with have to wait for Trinity' update. Trinity said that due to fixing some issues noted just last week, they will try to complete their part of deliverables before Friday, September 6th. JICA will then review and approve and give instruction for putting on CD and what to be printed on paper. Hopefully, these deliverables' packages will be presented/given to Mr. Makita during his visit to Skopje next week.

Next Steering Committee meeting was scheduled for **Friday, September 6th, 2013** at **10 a.m. at CMC**

Tasks to be accomplish and reported on the next meeting	Person/firm responsible	Deadline
Prepare and make functional the two Testing environments at CMC	CMC/ Mr. Karafilovski	Friday, September 6th, 2013
Prepare concrete clarification questions for meeting with PEMF	SIMT and Trinity	Friday, September 6th, 2013
Put on FTP site all the SD1 deliverables for JICA review	SIMT and Trinity	Friday, September 6th, 2013

MINUTES

Steering Committee Meeting

held on September 6th, 2013 at 10 a.m. in CMC HQ meeting room

Note taker: Ljupco Tagasovski

Attendees:

Eisho Sato, Honda Yasuyo, Hiroyuki Kozu – **JICA**

Stevko Stefanoski, Igorce Karafilovski – **CMC**

Ljupcho Tagasovski – **EDUSOFT**

Predrag Radojicic, Anastas Ristevski - **SIMT**

Igor Mazganski – **TRINITY**

Miroslav Grujevski, Jovan Chakovski **- PEMF**

Agenda topics	Topic Mediator
1 Report on status of tasks from previous meeting	- assignees
2 PEMF related functional requirements	- Open

MINUTES	JICA SD2 Project for Improvement of Integrated System for Prevention and Early Warning of Forest Fires **Steering Committee Meeting** held on September 6th, 2013 at 10 a.m. in CMC HQ meeting room

Agenda topic:	Report on status of assigned tasks	- JICA

In the opening Ms. Honda reconfirm the AWS related meeting at HydroMet at 12:30 same day and welcomed PEMF participants Mr. Grujevski and Mr. Chakovski. Wrapping up, Ms. Honda emphasized that in contrast to previous SD1 project, now for the current SD2 there is much less time for completion. He reminded that in accordance to the signed contract, the deadlines are definitive and firmed, and therefore the whole improvements have to be completed in little bit more then next two months. Once the SDD is created and approved, there will not be additions to it. She also noted that due to short deadlines the work on SD2 shall got the maximum attention, and therefore the work on SD1 deliverables can be only for fixing bugs and irregularities, i.e. no time for SD1 additional modifications.

Trinity reported that they have FTP-ed all their SD1 deliverables, and now underway is integration with SIMT ones. SIMT said that they will finish the integration and wrap-up on the FTP site all the SD1 deliverables by the end of the day.

Mr. Karafiloski from CMC reported that the Testing environment has been established at CMC HQ, and invited SIMT and Trinity to log and check them.

Agenda topic:	PEMF related functional requirements	all

Mr. Kozu then briefly went through the list of Functional requirement items related to PEMF, reconfirming that all their comments are reflected in that list. Mr. Radojicic and Mr. Ristevski from SIMT pointed out some items from that list for which additional clarification and additional explanations are needed, among which: Definitive list of three types, unsuitability of Form-8 regarding 5-year vs 10-year terms, defining which reports/recapitulars out of existing 38 ones at FMU level will also have to be created at National and Regional levels too, P2 Fire Reports issues, etc.

It was agreed that PEMF participants at the meeting cannot answer right away nor make decision but shall rather firstly make internal consultations upon which provided will be corresponding answers and clarifications. Because of tidily deadlines, SIMT will participate at PEMF's internal meeting next week in order to push and have PEMF's definitive answers and clarification by the end of next week.

Agenda topic:	Other Project program activities	- all

JICA, CMC and SIMT representatives continue the meeting at HydroMet premises to discuss the AWS related issues.
Next Steering Committee meeting was scheduled for **Friday, September 13th, 2013** at **10 a.m. at CMC**

Tasks to be accomplish and reported on the next meeting	Person/firm responsible	Deadline
Push for and participate in internal PEMF meeting in order to get their final and detailed functional requirement	SIMT	Friday, September 13th, 2013
Review, approve and instruct what SD1 deliverables (put previously on FTP site by SIMT and TRINITY) to be put on CD and what needs to be printed on paper	JICA	Friday, September 13th, 2013

JICA SD2 Project for Improvement of
Integrated System for Prevention and Early Warning of Forest Fires
Steering Committee Meeting
held on September 27th, 2013 at 1:30 p.m. in CMC HQ meeting room

MINUTES

Note taker: Ljupco Tagasovski

Attendees:

Eisho Sato, Honda Yasuyo, Hiroyuki Kozu – **JICA**

Stevko Stefanoski, Igorce Karafilovski – **CMC**

Ljupcho Tagasovski – **EDUSOFT**

Predrag Radojicic, Anastas Ristevski - **SIMT**

Igor Mazganski – **TRINITY**

Agenda topics	Topic Mediator
1 Concluding the CDD ver.1	- Open

Agenda topic:	Report on status of assigned tasks	- JICA

It was a brief meeting dedicated to finalizing the CDD ver.1. Some changes in the CDD document were made on the spot, during the meeting. The adopted version was distributed/e-mailed immediately after the meeting to all involved parties.

At the end of the meeting Mr. Sato announced officially that CDD ver. 1 is formally approved by purchaser and User, and therefore the contracted developers can practically move forward and start with adequate changes due to improve the system.

Agenda topic:	Other Project program activities	-

Next Steering Committee meeting scheduled for **Friday, October 4th, 2013** at **10 a.m. in CMC**

- SD 2 -

WEEKLY PROGRESS REPORT   No.1
Period until October 2nd, 2013

Author: EDUSOFT, SIMT, TRINITY

Creation Date: October 2nd, 2013

Seq.No	Task Description	Assignee	Current % of progress	Start Date	End Date	Target date
4.2	**Improve MKFFIS User Inteface**					
	Reform MKFFIS Left pane		20%			
	a) Remove Accordion menu, Navigation and Layers button from the left pane.	TRINITY	40%	02.10.2013	10.10.2013	10.10.2013
	b) Add Tab control with five tabs.	TRINITY	40%	02.10.2013	10.10.2013	10.10.2013
	c) Deploy Layers panel in the first tab named 'Layers'. This tab should be a default. (See Fig. 7)	TRINITY		02.10.2013	10.10.2013	10.10.2013
	d) Deploy Map Selector in the second tab named 'Maps'. Show hierarchy of each map using a tree view control, except vegetation map. Show only the root node for vegetation map in the tree view. (See Fig.6) Because vegetation map has a lot of FMUs as its children, FMU selector should be accommodated in a separate tab (e). (See Fig. 8)	TRINITY	40%	02.10.2013	10.10.2013	10.10.2013
4.2.1	**e)** Deploy FMU selector in the third tab named 'FMU'. (See Fig. 8)	TRINITY	40%	02.10.2013	10.10.2013	10.10.2013
	f) Deploy an accordion menu with two menu items in the fourth tab named 'Search'. Deploy Search Forest History panel in the first accordion menu item. (See Fig. 10)	TRINITY	40%	02.10.2013	10.10.2013	10.10.2013
	g) Deploy AWS Overview panel in the fifth tab named 'AWS'. (See Fig. 9)	TRINITY	40%	02.10.2013	10.10.2013	10.10.2013
	h) Tab names should be displayed in the language specified by the current language mode.	TRINITY	40%	02.10.2013	10.10.2013	10.10.2013
	i) Layer settings in the Layers panel (Order of the layers, selected maps) and selected maps in the Map Selector and FMU selector shall be kept in a table with a relation to the user account, and when the user logs in again, the settings shall be restored.	TRINITY	0%	TBD	20.11.2013	20.11.2013
	Add a link to user manual		%			
4.2.2	**a)** Add a link to end user manual of MKFFIS GIS to the tool bar.	TRINITY	0%	TBD	20.11.2013	20.11.2013

	b) Add a link to end user manual of MKFFIS Fire Report to the top link.	TRINITY	0%	TBD	20.11.2013	20.11.2013
	c) In English mode link to the user manual of English version, and In Macedonian mode link to the user manual of Macedonian version.	TRINITY	0%	TBD	20.11.2013	20.11.2013
4.2.3	**Change background image seasonally**		%			
	a) Change background image on the login page seasonally. Image for each season will be provided by USER.	TRINITY	0%	TBD	20.11.2013	20.11.2013
4.2.4	**Add a common calendar control**					
	a) Currently, vegetation dryness map (VDM) and FWI map have their own calendar control independently. And each hotspot (Seviri, Modis and Modis raw) has selections of 1 day ago, 2 days ago and 3 days ago.	TRINITY	20%	.04.10.2013	15.10.2013	15.02.2013
	b) Remove the calendar control for VDM and FWI map.	TRINITY	20%	04.10.2013	15.10.2013	15.10.2013
	c) Remove the hot spot selections: 1 day ago, 2 days ago and 3 days ago.	TRINITY	20%	04.10.2013	15.10.2013	15.10.2013
	d) Rename hot spot selections: 'Seviri (Today)' as 'Seviri', 'Modis (Today)' as 'Modis' and 'Modis raw data (Today)' as 'Modis raw data'.	TRINITY	20%	04.10.2013	15.10.2013	15.10.2013
	e) Add a calendar control with label 'Date' on the space where currently 'Navigation' is there. (See Fig. 7)	TRINITY	0%	TBD	20.11.2013	20.11.2013
	f) Add a check box with label 'Now' next to the above calendar control. 'Now' shall be checked by default. *Labels should be in the language specified by current language mode.	TRINITY	0%	TBD	20.11.2013	20.11.2013

	g) Modify code as follows: • When a past day is specified by the calendar control, clear 'Now' check box, show VDM, FWI map, hotspots and real-time disaster report (see 4.3.5.4) of the day specified. • When 'Now' check box is checked, show vegetation map, FWI map, hotspots and real-time disaster report of the current day, and keep updating these four real-time maps.	TRINITY	20%	04.10.2013	15.10.2013	15.10.2013
4.2.5	**Display FWI Map of the previous day until today's FWI Map becomes available**					
	a) Currently, FWI Map is not shown until a day is specified by its calendar control.	TRINITY	0%	TBD	20.11.2013	20.11.2013
	b) Modify code as follows: When 'Now' is checked (it is checked by default) FWI Map of now should be displayed. But FWI Map is created almost every day at 2pm. Therefore, it shall be displayed by the following rule. •If FWI Map of the current day exists now, display it. •Otherwise display FWI Map of one day before, if such exists. •Otherwise don't display FWI Map.	TRINITY	0%	TBD	20.11.2013	20.11.2013
4.2.6	**Relocate vegetation map's attribute selector from Layers panel to the top of FMU selector**					
	a) Currently, attribute selectors of vegetation map are located in the Layers panel for each FMU (See Appendix A.4)	TRINITY	0%	TBD	20.11.2013	20.11.2013
	b) Remove all the attribute selectors from the Layers panel.	TRINITY	0%	TBD	20.11.2013	20.11.2013
	c) Add one attribute selector to the top line of FMU selector accommodated in the FMU Tab. (See Fig. 8)	TRINITY	0%	TBD	20.11.2013	20.11.2013
	d) Modify code to apply the selected attribute to all the FMUs.	TRINITY	0%	TBD	20.11.2013	20.11.2013
4.3	**Add New Layers / Improve Layers**					
4.3.1	**Improve Vegetation map Layer by including National Parks**					
	a) Shape files for three national parks will be provided from PURCHASER/USER.	TRINITY	0%	TBD	20.11.2013	20.11.2013

	b) Classification of species of National parks is not compatible to PEMF classification. So, Classification shall be converted to be compatible to PEMF's according to direction of PURCHASER/USER.	TRINITY	0%	TBD	20.11.2013	20.11.2013
	c) Add each National park FMU polygon as a member of PEMF FMU group.	TRINITY	0%	TBD	20.11.2013	20.11.2013
4.3.2	**Improve Vegetation map Layer by including Protected area Zone 1**					
	a) Shape files for Protected area Zone 1 will be provided from PURCHASER/USER. They don't contain attributes.	TRINITY	0%	TBD	30.11.2013	30.11.2013
	b) Add each Protected area Zone 1 polygon as a member of PEMF FMU group.	TRINITY	0%	TBD	30.11.2013	30.11.2013
4.3.3	**Add a New Layer for MGRS Grid**					
	a) Add MGRS grid.	TRINITY	0%	TBD	30.11.2013	30.11.2013
	b) Idea of implementation of MGRS grid can be obtained from http://dhost.info/usngweb/ (* definition of MGRS grid is different from definition of U.S. National Grid)	TRINITY	0%	TBD	30.11.2013	30.11.2013
	c) Definition of MGRS Grid can be obtained from http://earth-info.nga.mil/GandG/coordsys/grids/mgrs.doc	TRINITY	0%	TBD	30.11.2013	30.11.2013
	d) Suitable grids according to current zoom-in factor shall be selectable from Zone, 100km, 10km, 1km, 100m and 10m.	TRINITY	0%	TBD	30.11.2013	30.11.2013
4.3.4	**Add a new Layer "Damage Forest Value Map"**					
	a) Add a user privilege to enable/disable to access this map. When this layer is selected following functions shall be enabled.	TRINITY	0%	TBD	30.11.2013	30.11.2013
	b) Allow users to draw a polygon	TRINITY	0%	TBD	30.11.2013	30.11.2013
	c) Find intersections of the drawn polygon and subcompartments	TRINITY	0%	TBD	30.11.2013	30.11.2013

	d) As table form, the following data shall be shown for the intersected area: • CompartmentNo./SubCompartmentNo. • Intersected Area (ha) • Total Area of Subcompartment (ha) This value should be taken from Form9 of Inventory for corresponding subcompartment • % of intersected area over total area of subcompartment This value should be calculated by Intersected Area / total area of subcompartment x 100 • Value for the intersected area This value should be calculated as Value of Forest x % of intersected area where Value of Forest area shall be taken from corresponding field in Form 9 of Inventory • Total Value for the intersected areas	TRINITY	0%	TBD	30.11.2013	30.11.2013
	e) Result intersection polygons shall be displayed in this layer with a color classification according to the total value for the intersected areas. User shall provide classification of colors by value.	TRINITY	0%	TBD	30.11.2013	30.11.2013
4.3.5	**Add new layer group – CMC Operation Maps**					
4.3.5	**a)** Add a user privilege to enable/disable to access this Layer group.	TRINITY	0%	TBD	30.11.2013	30.11.2013
	b) When this layer group is selected, user is allowed to draw a polygon which is used for inner polygon searches enabled by corresponding inner polygon search switches. (see Fig.6-A)	TRINITY	0%	TBD	30.11.2013	30.11.2013
	c) State of inner polygon search switches shall be kept in a table with a relation to the user account, and when the user logs in again, the state shall be restored.	TRINITY	0%	TBD	30.11.2013	30.11.2013
	d) The node of "CMC Operation Maps" shall be expanded by default.	TRINITY	0%	TBD	30.11.2013	30.11.2013
4.3.5.1	**Add a "Resource Map" Layer**					

	a) Create and display resource icons corresponding to resource types at the coordinates specified in resource records from UNDP Database. (See Appendix B-1)	TRINITY	0%	TBD	30.11.2013	30.11.2013
	b) This is not a permanent map. Successful PROPOSER shall write code to create and replace the map once a month.	TRINITY	0%	TBD	30.11.2013	30.11.2013
	c) Add function for optional inner polygon search. Breakdown of resources in the drawn polygon shall be displayed as a table in the search result pane.	TRINITY	0%	TBD	30.11.2013	30.11.2013
	Add a "Facility inventory Map" Layer					
4.3.5.2	**a)** Create and display facility inventory icons corresponding to facility types at the coordinates specified in facility inventory records from UNDP Database. (See Appendix B-1)	TRINITY	0%	TBD	30.11.2013	30.11.2013
	b) This is not a permanent map. Successful PROPOSER shall write code to create and replace the map once a month.	TRINITY	0%	TBD	30.11.2013	30.11.2013
	c) Add function for optional inner polygon search. Breakdown of facility inventory in the drawn polygon shall be displayed as a table in the search result pane.	TRINITY	0%	TBD	30.11.2013	30.11.2013
	Add a "Demographic Map" Layer					
4.3.5.3	**a)** Show a thematic map showing total population by color classification using border of settlements.	TRINITY	0%	TBD	30.11.2013	30.11.2013
	b) This is not a permanent map. Successful PROPOSER shall write code to create and replace the map once a month.	TRINITY	0%	TBD	30.11.2013	30.11.2013
	c) Demographic information will be in a database to be created by UNDP which will become accessible from MKFFIS in mid July 2013. (see Appendix B-2)	TRINITY	0%	TBD	30.11.2013	30.11.2013
	d) Add function for optional inner polygon search. Breakdown of total population of each settlement which is intersected by the drawn polygon shall be displayed in the search result pane.	TRINITY	0%	TBD	30.11.2013	30.11.2013

	Real-time disaster report from RCMC					
	a) Add a user privilege to enable/disable this function	TRINITY	30%	05.10.2013	01.11.2013	01.11.2013
	b) Users having this privilege are able to send/edit/delete disaster report. Report consists of followings. • Geographic information (polygon, line, point, icon) drawn/dropped on the MKFFIS Map Pane • Text information (Details shall be decided by USER)	TRINITY	30%	05.10.2013	01.11.2013	01.11.2013
	c) Disaster report sent shall be stored in Disaster Report Database. (Successful PROPOSER shall prepare this database).	TRINITY	30%	05.10.2013	01.11.2013	01.11.2013
4.3.5.4	**d)** The report sent, edited, deleted shall be reflected in real time to all the MKFFIS users who are online.	TRINITY	30%	05.10.2013	01.11.2013	01.11.2013
	e) Geographic information sent shall be displayed as a Real-time disaster Map which is one member layer of the CMC Operation Maps. (see Fig.6-A)	TRINITY	30%	05.10.2013	01.11.2013	01.11.2013
	f) Alarm message shall be displayed upon arrival of real-time disaster report. (In a message box for example)	TRINITY	30%	05.10.2013	01.11.2013	01.11.2013
	g) Salvage as much data as possible from ESRI Application created on ArcSDE (see APPENDIX C). Source code is not available for ESRI Application, but user account of ArcSDE database (MSSQL) will be provided.	TRINITY	0%	TBD	01.11.2013	01.11.2013
	h) If type of disaster is forest fire; create a new CMC Forest Fire Report. (Refer to 4.6.1)	TRINITY	0%	TBD	01.11.2013	01.11.2013
	Search disaster reports					
4.3.5.5	**a)** Add a panel for this search in the second menu item of the accordion menu in Search tab. (see Fig. 10)	TRINITY	0%	TBD	30.11.2013	30.11.2013
	b) Only the filter by CMC classification is required. PEMF classification is not necessary.	TRINITY	0%	TBD	30.11.2013	30.11.2013

	c) Search disaster report panel has following controls: • From Date • To Date • GCUK unit selector • RCUK unit selector • Municipality and Settlement selector • Type of events • Search Report button • Clear Result button • Print Result button	TRINITY	0%	TBD	30.11.2013	30.11.2013
	d) Search result shall be shown in the search result pane.	TRINITY	0%	TBD	30.11.2013	30.11.2013
	e) Color of GCUK or RCUK polygons shall be classified by the number of disasters in the polygons in the specified period.	TRINITY	0%	TBD	30.11.2013	30.11.2013
	f) Result Map shall be displayed as a 'Disaster search result' which is one member layer of the CMC Operation Maps. (see Fig.6-A)	TRINITY	0%	TBD	30.11.2013	30.11.2013
	g) As for Print Result function, format of printed report shall be provided by USER.	TRINITY	0%	TBD	30.11.2013	30.11.2013
4.4	**Add New Functions to MKFFIS**					
4.4.1	**Grid Inforamtion**					

	a) Show following information of a MGRS Grid clicked. • MGRS Grid code • Summary of resources in the grid (see Appendix B-1). Resources are in a database created by UNDP which is accessible from MKFFIS. • Summary of disaster events in the grid. Disaster events are in a database created by UNDP which is accessible from MKFFIS. • Summary of facility inventories in the grid. Inventories are in a database created by UNDP which is accessible from MKFFIS. • FWI at the center of the grid. FWI grid values are kept as GeoTIFF image. • ⯑ Vegetation dryness at the center of the grid. Vegetation dryness grid values are kept as GetTIFF image.	TRINITY	0%	TBD	30.11.2013	30.11.2013
4.4.2	**Demographic information**					
	a) Show demographic information of an administrative area clicked (National, Municipalities, Settlements). When info button is clicked, show summary, and detail table representation to be shown below on the screen.	TRINITY	0%	TBD	30.11.2013	30.11.2013
	b) Demographic information will be in a database to be created by UNDP which will become accessible from MKFFIS in mid July 2013.	TRINITY	0%	TBD	30.11.2013	30.11.2013
	c) Demographic information to be shown on the info button and detailed table will be decided by USER.	TRINITY	0%	TBD	30.11.2013	30.11.2013
4.4.3	**Add means to switch Between MKFFIS for internal purpose and MKFFIS for Public**					

	a) Currently, MKFFIS serves for internal purpose controlling available features by user account. But another instance of MKFFIS will be installed on the Internet Server to serve public users. MKFFIS for Public can be opened without login process, but much stronger restriction will be applied. Successful PROPOSER shall add means to switch from MKFFIS for internal purpose to MKFFIS for Public. Following procedure is an example of solution. • Define a special user GUEST. • Restriction to the public user will be applied by privilege settings of user GUEST. • Add necessary exceptions applicable to GUEST user. For example, user profile of GUEST user is not kept . • Prepare PUBLIC flag in a configuration file of MKFFIS GIS. • If the flag is OFF, MKFFIS starts normally from the login page. • VI. If the flag is ON, MKFFIS skips login page and starts from the main page, setting user name to GUEST automatically.	TRINITY	0%	TBD	30.11.2013	30.11.2013
	b) Link to MKFFIS for internal purpose shall be added to the MKFFIS for public.	TRINITY	0%	TBD	30.11.2013	30.11.2013
4.4.4	**Add function to fill section 5.1 in *P2* report taking meteorological data from AWS.**					
	a) Add an AWS select box next to the 'Meteorological Station' text box. (See Fig..11) AWS Names in the select box shall be taken dynamically from the 'meteorologicalstations' table in the CUK database.	TRINITY SIMT	0% 50%	TBD 25.09.2013	30.11.2013	30.11.2013 02.10.2013
	b) Search the meteorological data of the selected AWS which is closest to the date/time specified in the '2.2 Detection' text box.	TRINITY Simt	0% 50%	TBD 25.09.2013	30.11.2013	30.11.2013 02.10.2013

	c) If there is no data between 3 hours before and after the date/time specified by the '2.2 Detection' text box, show message 'No AWS data available' and do nothing to the textboxes, otherwise fill following textboxes in the section 5.1 of P2 report. • Meteorological Station: (name of meteorological station) • hour: (hour of the meteorological data measured) • Number of days from last raining: (to fill this box some calculation is necessary) • Maximum temperature: (fill maximum temperature of the specified day) • Relative humidity • Wind Speed • Direction (Wind direction)	TRINITY	0%	TBD	30.11.2013	30.11.2013
	Changes requested from Damages deparment from CMC about forest fire report	SIMT	5%	03.10.2013	**TBD**	07.10.2013
4.5	**Add New Functions/Interface to GFIS**					
	Add a link to user manual					
4.5.1	**a)** Add a link to end user manual of GFIS GIS to the tool bar.	JICA				
	b) Add a link to end user manual of GFIS Planning to the top link.	JICA				
	c) Add a link to end user manual of GFIS Fire Report to the top link.	JICA				
	d) In English mode link to the user manual of English version, and In Macedonian mode link to the user manual of Macedonian version.	JICA				
4.5.2	**Limit available FMU by user privilege**					
	a) Add a function to the GFIS Admin page in order to specify FMUs under responsibility of each user.	TRINITY	0%	TBD	30.11.2013	30.11.2013
	b) Limit FMUs to display and/or edit according to above privilege.	TRINITY	0%	TBD	30.11.2013	30.11.2013

	c) Limit FMUs shown in the FMU Selector according to above privilege.	TRINITY	0%	TBD	30.11.2013	30.11.2013
	d) Zoom in FMU under responsibility of the user when that user opens GFIS GIS.	TRINITY	0%	TBD	30.11.2013	30.11.2013
4.5.3	**Allow access to past versions of forest plan.**					
	a) Currently, if a FMU polygon is edited and uploaded, old FMU polygons will be replaced by new FMU polygons. Therefore only the latest FMUs can be seen on GFIS GIS. Successful PROPOSER under the direction of PEMF shall add function to show FMUs in a past date specified by a calendar control. Following procedures are just an example of solution: • Add a calendar control to a suitable place on GFIS GIS. • Add attributes (effective from, expired on) to each FMU. • Preset some past date such as 1900.01.01 to 'effective from' and NULL to 'expired on'. • When a new FMU is uploaded, keep the old FMU and set its 'expired on' to the updated date. • Set the updated date to the new FMU's 'effective from' and set NULL to 'expired on'. • When a past date is specified, display FMUs according to their attribute 'effective from' and 'expired on'.	TRINITY	0%	TBD	30.11.2013	30.11.2013
4.5.4	**Search FMU by year of expiry of special plan**					
	a) Each FMU has its planning effective for ten years. And the duration is kept in the forest planning database. Successful PROPOSER under the direction of PEMF shall add a function to search FMUs which special plans expire in the year specified.	TRINITY SIMT	0% 0%	TBD 01.12.2013	30.11.2013 TBD	30.11.2013 20.12.2013
4.5.5	**Change monthly input to daily for form 3, 3a and 5**	SIMT	15.10.2013	TBD	25.10.2013	

	a) Currently, data entry to the form 3, 3a and 5 is carried out on a monthly basis. Successful PROPOSER under the direction of PEMF shall modify the code to cater to daily data entry. And add two options to the print function for these forms, one is daily summary, the other is monthly summary.	SIMT	0%	15.10.2013	TBD	25.10.2013
4.5.6	**Keep annual achievement for 10 years in Form 6**					
	a) Successful PROPOSER under the direction of PEMF shall modify code and design of Form 6 data entry sheet to keep annual achievement for 10 years for each sub compartment. Items to keep are as follows. • Area (ha) • Number of seedlings • Weight of seeds (kg)	SIMT	0%	26.10.2013	TBD	31.10.2013
4.5.7	**Keep annual achievement for 10 years in Form *8***					
	a) Successful PROPOSER under the direction of PEMF shall modify code and design of Form 8 data entry sheet to keep annual achievement for 10 years for each sub compartment. Items to keep are as follows. • Length of roads (km) • Cleared wood (m3)	SIMT	0%	01.11.2013	TBD	06.11.2013
4.5.8	**Fill area in Form 1 taken from polygon attribute**					
	a) Successful PROPOSER under the direction of PEMF shall modify code of Form 1 data entry sheet to fill area automatically taken from the attribute of polygon corresponding to selected sub compartment.	SIMT	0%	20.11.2013	TBD	01.12.2013
4.5.9	**Add National and Regional office level summaries to the reports in Reports/Rekapitulari menu.**					
	a) Currently, reports under the Reports/Rekapitulari menu are summary of selected FMU. Successful PROPOSER under the direction of PEMF shall add summary of National level and Regional Office level, and add links to corresponding summaries in the menu.	JICA				

	b) FMUs shall be classified by regional office in order to create regional office summary.	SIMT	5%	03.10.2013	TBD	20.10.2013
6.	**Improvement related to MKFFIS & GFIS modules**					
4.6.1	Modify PEMF Fire Report inpu t module to report by fire.					
	a) Currently fire report is created in PEMF by each sub compartment even in case of one big fire over several compartments. On the other hand, in the CMC fire report (P2 report) is fire based, not sub compartment based. Therefore, a fire report divided into several reports by sub compartment must be merged at CMC to create P2 report for one fire. There are some complaints in PEMF for this process. • PEMF does not want redundant data entry. For example, some common fields such as start of fire and end of fire should be entered repeatedly for each related sub compartment. • PEMF has authority to identify a fire over several sub compartments, therefore merging reports by sub compartment into one fire report should be conducted by PEMF. • Fire report from PEMF does not have to be by sub compartment. Report by fire is acceptable.	SIMT	0%	06.11.2013	TBD	25.11.2013
	b) Because P2 report module has a function to manage a report containing information of multiple sub compartments, applying the same approach to the PEMF fire report will be an elegant solution.	SIMT	0%	06.11.2013	TBD	25.11.2013

	c) Successful PROPOSER under direction of USER shall conduct following modification.	SIMT	0%	06.11.2013	TBD	25.11.2013
	• Modify current PEMF fire report module on GFIS Fire Report so that it can report by fire by adding functionality to manage information from multiple sub compartments.					
	• Remove MERGE PEMF REPORT function from P2 report module in MKFFIS Fire Report.					
	• Add IMPORT PEMF REPORT function to MKFFIS Fire Report					
	• Adjust P2 Report module on MKFFIS Fire Report to be able to show correctly the Fire report which was imported from PEMF REPORT					
	• Rename P2 Report as CMC Forest Fire Report.					
	• Add 'read-only' user privilege to GFIS Fire Report and MKFFIS Fire Report which allows MKFFIS user to browse PEMF fire report, and allows GFIS user to browse CMC Fire Report.					
	• Printing format of PEMF Fire Report to obtain approval of SiFH shall not be changed.					
7.	**Performance Tuning**					
	Performance tuning of MKFFIS		10%			
4.7.1	**a)** Currently, there are following complaints about speed. • MKFFIS GIS takes very long time to show the login page, if it is accessed over a long distance. For example, accessing from Japan, it takes 90 seconds to open the login page and another 90 • Speed to show FMUs is slow, and from time to time it fails to show them.	TRINITY	30%	02.10.2013	25.10.2013	25.10.2013
	b) MKFFIS GIS shall be optimized by execution speed.	TRINITY	30%	02.10.2013	25.10.2013	25.10.2013

	c) Optimization is not limited to source code level. All the possible factors shall be taken into account. For example, server configuration, deployment of files, network structure, use of external servers (Google server for jQuery), indexing of tables in databases, etc.	TRINITY	10%	02.10.2013	25.10.2013	25.10.2013
	d) Improvement of performance should be shown quantitatively.	TRINITY	15%	02.10.2013	25.10.2013	25.10.2013
4.7.2	**Performance tuning of GFIS**					
	a) Currently, there are following complaints about speed which are similar to MKFFIS GIS. • GFIS GIS takes very long time to show the login page, if it is accessed over a long distance. • Speed to show FMUs is slow, and from time to time it fails to show them.	TRINITY	0%	25.10.2013	05.11.2013	05.11.2013
	b) GFIS GIS shall be optimized by execution speed	TRINITY	0%	25.10.2013	05.11.2013	05.11.2013
	c) Optimization is not limited to source code level. All the possible factors shall be taken into account. For example, server configuration, deployment of files, network structure, use of external servers (Google server for jQuery), indexing of tables in databases, etc.	TRINITY	0%	25.10.2013	05.11.2013	05.11.2013
	d) Improvement of performance should be shown quantitatively.	TRINITY	0%	25.10.2013	05.11.2013	05.11.2013
8.	**Installation/QA/Training/Documentation**					
4.8.1	MKFFIS and GIS Installation, Quality Assurance, Training, Documentation					
4.8.2	GFIS and GIS Installation, Quality Assurance, Training, Documentation					

4.2 Improve MKFFIS User Interface

4.2.1 The 5 tabs have been created and now we are in the process of making the transfer of everything in the correct tab.

4.2.3 The calendar control function is under development. For the hotspot maps the plan is to publish all of the information in one shape file per hotspot map and the viewing will be filter based (from the attribute date in each of the layers).

4.3.5.4 According to the meeting held in CMC HQ with Mr. Karafilovski and representatives from RCUK the preliminary design of the creation of Disaster reports was determined. It was decided that for now we shall fully create a disaster even/report template for Fires only.

4.3 Add New Layers / Improve Layers

4.3.1 Improve Vegetation map Layer by including National Parks TRINITY & SIMT (b, c)
Target: MKFFIS GIS and GFIS GIS
According to the meeting at Friday, 06.09.2013 in PEMF with people form planiang section (Blaze and Miroslav),they explain that only shape attributes need to be added in the MKFFIS. There is no need for adding FMU's for planning in the PEMF attribute database or any database migration.

4.3.5.4 Real-time disaster report from RCMC TRINITY & SIMT
Target: MKFFIS GIS
*Very important is that topic **h** in the FSD for this section (If type of disaster is forest fire; create a new CMC Forest Fire Report) is abandoned according to the meeting in Monday, 16.09.2013 at CMC. CMC Persons agreed that this module will not be connected with forest fire reporting module, they will be separate modules.*

4.4 Add New Functions to MKFFIS

4.4.4 Add function to fill section 5.1 in P2 report taking meteorological data from AWS. SIMT
Target: MKFFIS Fire Report
SIMT postponed Initial date for first demo at CMC Test server originally planned for Friday September 27th, because of request for making changes in the report by damages department from CMC.

4.5 Add New Functions/Interface to GFIS

4.5.4 Search FMU by year of expiry of special plan TRINITY & SIMT
Target: GFIS GIS
For this function, user will have form where he selects FMU and year. According to that selection, if in the selected year plan for current FUM exist, system will open that old plan with all forms and reports. Also in the header of the page, selected plan with from-to year will be shown.

4.5.5 Change monthly input to daily for form 3, 3a and 5 SIMT
Target: GFIS Planning
Field for day will be added. Also, type of phase field will be added – it can be one from these options: transport, logging and supply. There will be two kinds of printouts. First will be right page from the plan according to the law, where no grouping per day, month or year will exist. Second will be summary reports where only phase type will be shown as columns, and as a row will be shown type of tree. These summaries will be on FMU level, regional center level or state level.
Also, very important is that system need to allow input of logging for sub-compartments, where logging was not planed (in rare occasions PEMF users need that function).

4.5.6 Keep annual achievement for 10 years in Form 6 SIMT
Target: GFIS Planning
New form will be created, and print out of right page will be created.

4.5.7 Keep annual achievement for 10 years in Form 8 SIMT
Target: GFIS Planning
New form will be created, and print out of new generated and designed right page will be created, very similar as right page of form 6.

4.5.8 Fill area in Form 1 taken from polygon attribute SIMT
Target: GFIS Planning
New function will be added, where user will click on button and system automatically fills form 1 from shape file database. If old plan is used, system will update areas for matching items, and no exist items in the shape files will be deleted from planning database and if new shape files are added, then new items will be added in the planning database.

4.5.9 Add National and Regional office level summaries to the reports in Reports/Rekapitulari menu. SIMT
Target: GFIS Planning

SIMT started with creating views in the database and queries which collects data from form 2 and form 2a and summaries by regional center and state level. Three views are created – for report by form od management, for report by cultivation form and by report for clean and mixed trees in uneven and even aged stands.

Only summary for both form 2 and form 2a will be added (at regional center level and state level):
1. Composition of plantations report

2. Form of cultivation report

3. Form of management report

4. Economy class report

5. Growing ratio report

6. Mixed and clean even aged plantations report

7. Phytocenosys report

8. Quality of stand report

9. Slope report

10. Soil report

11. Place of growth report

12. Within report

13. Aspect report

4.6 Improvement related to both MKFFIS and GFIS modules

4.6.1 Modify PEMF Fire Report input module to report by fire. SIMT

Target: GFIS Fire Report, MKFFIS Fire Report
1.   Change in PEMF fire report
a.   PEMF fire report record will be created for each fire with multiple damaged sub-compartments information.

b.   *Damage to unmanaged area will be added to PEMF fire report. Also here will have code table with type of area that is not in jurisdiction of PEMF – agriculture, etc.*
2.   *Fire report merge function will be discarded. (There will be no need to merge)*
3.   *Once the PEMF official click on "submit to RCMC" with the same meaning as report is finalized, Fire Report (Former P2 report) record will be created.*
4.   *RCMC will add the data in Fire Report which does not come from PEMF*
5.   *If PEMF report is not valid by Inspectorate: PEMF updates the data in PEMF fire report according to Inspectorate's instruction*

4.7.1 Trinity extensively works on finding ways of fixing the performance issues. Unnecessary scripts are being deleted, performance tuning on the loading of the layers is done, external loading of the scripts is done etc.

Note taker: Ljupco Tagasovski

Attendees:

Eisho Sato, Honda Yasuyo, Hiroyuki Kozu – **JICA**

Stevko Stefanoski, Igorce Karafilovski – **CMC**

Ljupcho Tagasovski – **EDUSOFT**

Predrag Radojicic, Anastas Ristevski - **SIMT**

Igor Mazganski – **TRINITY**

	Agenda topics	**Topic Mediator**
1	Briefing on Trinity - CMC Operation Section meeting	- Trinity
2	Report on SD2 progress	- Trinity and SIMT
3	SD1 performance issues	- Trinity and SIMT
4	Other	- open

	JICA SD2 Project for Improvement of
MINUTES	**Integrated System for Prevention and Early Warning of Forest Fires**
	Steering Committee Meeting
	held on October 4th, 2013 at 10 a.m. in CMC HQ meeting room

Agenda topic: **Trinity - CMC Operation Section meeting** **- JICA**

Mr. Sato opened the meeting introducing the Agenda topics as follows:

1. <u>Briefing on *Trinity - CMC Operation Section* meeting</u> held this week. Mr. Mazganski from Trinity informed that it was a useful meeting which clarified a lot of things about how this CMC Section currently operates and what do they need and expect to get from switching to new application. Trinity was also given a documented technical material prepared by Mr. Karafilovski from CMC. As wrap up conclusion Mr. Mazganski from Trinity informed that basically it will be completely new set of functionalities and many, many new reports to be added into the current solution. For each category of event, new vector map layer will be created which will be constantly updated, showing always the current situation (no need to save past, historical traces). Bellow the map will be a info panel showing on the left-side event's information and on the right-side accompanying reports. Anticipated is that due to need of so many, numerous different reports they will be done during the warranty period.

   Mr. Kozu's opinion is that integrating this CMC Operational Section task is far the biggest and the most complicated item in the list of SD2 deliverables. Therefore Mr. Kozu expressed concerns that these new additions to the already too long list of deliverables envisioned to be accomplished in such a short time, will burdened and stretch too much Trinity's resources and asked does Trinity have enough programmers. Mr. Mazganski answered that currently a team of 5 Trinity people are engaged in the SD2 development and that adding more will not be quite beneficiary nor effective. According to him the System Performance deliverable is the biggest and the most complex topic comparing it with "basic tool in a wall" which will require the biggest attention, effort and time. Mr. Kozu offered Trinity help and assistance regarding the "performance" deliverable.

   Ms. Honda suggested careful approach to this issue of adding more and more deliverables into the list, expressing concern is everything realistically doable within the given timefram. She once again reminded about the fact that no deadline extensions or prolongations are possible, and therefore suggested that Trinity should really evaluate and estimate the volume of work versus affordable time and resource. She asked Trinity by next Wednesday to produce a categorized deliverable list, i.e. what is realistically doable by December, what can left to be realistically accomplished during Warranty period, and lastly what ca not be done at all. JICA and CMC should be provided with this categorized deliverables list one day in advance of next meeting which will probably be held next Thursday, October 10th.

   Mr. Karafilovski from CMC suggested listed to be functionalities and just couple of reports while for the rest of the reports to be noted that they will be done during the Warranty period. He also suggested on the next meeting Trinity to illustrate the categorized deliverables list with some demo envisioned on-line examples.

   Concluding the topic, Mr. Mazganski agreed and promised to once again carefully and realistically reevaluate and afterwards to prepare and send out the categorized list of

	JICA SD2 Project for Improvement of
MINUTES	**Integrated System for Prevention and Early Warning of Forest Fires**
	Steering Committee Meeting
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deliverables, as well to try to prepare (not promising anything) some illustrative examples for the next meeting.

Agenda topic:	Report on SD2 progress	- Trinity, SIMT

2. SD2 weekly progress report. On behalf of Trinity, Mr. Mazganski reported that they have already started with the most sensitive part regarding the system performance which is the basic ground for everything else. Simultaneously they have pre-prepared some of the required new functionalities too. Trinity re-took obligation to record their SD2 progress in a regular written form trough Weekly Progress Report by next meeting. Mr. Kozu remind Trinity also to send e-mail notification to JICA and CMC each time Trinity intervene and change something in the running system and/or each time when they update the FTP folders. Mr. Mazganski promised to take care Trinity to comply with the contracted obligations.

On behalf of SIMT, Mr. Radojicic informed that they have started effective development work in accordance with the CDD, although they have still not obtained PEMF formal concurrence. JICA was asked if possible to push PEMF for such approval. In meantime, while developing other deliverables, SIMT also waits CMC Operations Section to provide clarifications and specifications for some of the requested reports.

Agenda topic:	SD1 performance issues	- Trinity, SIMT

3. SD1 current status. JICA representatives asked for explanation regarding some SD1 still malfunctioning, file transferring and FWI generating. In that context, Trinity was asked to:
   - Check and report back if previously applied fixes were temporary or permanent ones
   - Properly to document fixes in FTP folders, and to
   - Promptly send e-mails notifying about their latest interventions and changes.

Agenda topic:	program activities	- all

Because next Friday is a national holiday non working day, tentatively the Next Steering Committee meeting scheduled for **Thursday, October 9th, 2013 at 10 a.m. in CMC**

Tasks to be accomplish and reported on the next meeting	Person/firm responsible	Deadline
Check and report on FWI generation issue, and weather previous fixes are temporary or permanent and accordingly document them in SD1 deliverables FTP site	TRINITY	Monday October 7th, 2013
Carefully and realistically re-evaluate the list of deliverables, categorized them into a list with 3 categories (doable by December, doable in Warranty period, and not doable at all) and send it to CMC and JICA for a pre-meeting review.	TRINITY	Wednesday, October 9th, 2013
Prepare and submit Weekly Progress Report.	SIMT and TRINITY	Wednesday, October 9th, 2013
If possible prepare illustrative examples on testing site to be shown and disused on next meeting	TRINITY	Thursday, October 9th, 2013

- SD 2 -

WEEKLY PROGRESS REPORT   No.2

For period from October 3rd to October 9th, 2013

Author: EDUSOFT, SIMT, TRINITY

Creation Date: October 9th, 2013

Seq.No	Task Description	Assignee	Current % of progress	Start Date	End Date	Target date
4.2	**Improve MKFFIS User Inteface**					
	Reform MKFFIS Left pane		20%			
	a) Remove Accordion menu, Navigation and Layers button from the left pane.	TRINITY	60%	02.10.2013	10.10.2013	10.10.2013
	b) Add Tab control with five tabs.	TRINITY	60%	02.10.2013	10.10.2013	10.10.2013
	c) Deploy Layers panel in the first tab named 'Layers'. This tab should be a default. (See Fig. 7)	TRINITY		02.10.2013	10.10.2013	10.10.2013
	d) Deploy Map Selector in the second tab named 'Maps'. Show hierarchy of each map using a tree view control, except vegetation map. Show only the root node for vegetation map in the tree view. (See Fig.6) Because vegetation map has a lot of FMUs as its children, FMU selector should be accommodated in a separate tab (e). (See Fig. 8)	TRINITY	60%	02.10.2013	10.10.2013	10.10.2013
4.2.1	**e)** Deploy FMU selector in the third tab named 'FMU'. (See Fig. 8)	TRINITY	60%	02.10.2013	10.10.2013	10.10.2013
	f) Deploy an accordion menu with two menu items in the fourth tab named 'Search'. Deploy Search Forest History panel in the first accordion menu item. (See Fig. 10)	TRINITY	40%	02.10.2013	10.10.2013	10.10.2013
	g) Deploy AWS Overview panel in the fifth tab named 'AWS'. (See Fig. 9)	TRINITY	40%	02.10.2013	10.10.2013	10.10.2013
	h) Tab names should be displayed in the language specified by the current language mode.	TRINITY	40%	02.10.2013	10.10.2013	10.10.2013
	i) Layer settings in the Layers panel (Order of the layers, selected maps) and selected maps in the Map Selector and FMU selector shall be kept in a table with a relation to the user account, and when the user logs in again, the settings shall be restored.	TRINITY	0%	TBD	20.11.2013	20.11.2013
	Add a link to user manual		%			
4.2.2	**a)** Add a link to end user manual of MKFFIS GIS to the tool bar.	TRINITY	0%	TBD	20.11.2013	20.11.2013

	b) Add a link to end user manual of MKFFIS Fire Report to the top link.	TRINITY	0%	TBD	20.11.2013	20.11.2013
	c) In English mode link to the user manual of English version, and In Macedonian mode link to the user manual of Macedonian version.	TRINITY	0%	TBD	20.11.2013	20.11.2013
4.2.3	**Change background image seasonally**		%			
	a) Change background image on the login page seasonally. Image for each season will be provided by USER.	TRINITY	0%	TBD	20.11.2013	20.11.2013
4.2.4	**Add a common calendar control**					
	a) Currently, vegetation dryness map (VDM) and FWI map have their own calendar control independently. And each hotspot (Seviri, Modis and Modis raw) has selections of 1 day ago, 2 days ago and 3 days ago.	TRINITY	20%	.04.10.2013	15.10.2013	15.02.2013
	b) Remove the calendar control for VDM and FWI map.	TRINITY	20%	04.10.2013	15.10.2013	15.10.2013
	c) Remove the hot spot selections: 1 day ago, 2 days ago and 3 days ago.	TRINITY	20%	04.10.2013	15.10.2013	15.10.2013
	d) Rename hot spot selections: 'Seviri (Today)' as 'Seviri', 'Modis (Today)' as 'Modis' and 'Modis raw data (Today)' as 'Modis raw data'.	TRINITY	20%	04.10.2013	15.10.2013	15.10.2013
	e) Add a calendar control with label 'Date' on the space where currently 'Navigation' is there. (See Fig. 7)	TRINITY	0%	TBD	20.11.2013	20.11.2013
	f) Add a check box with label 'Now' next to the above calendar control. 'Now' shall be checked by default. *Labels should be in the language specified by current language mode.	TRINITY	0%	TBD	20.11.2013	20.11.2013

	g) Modify code as follows: • When a past day is specified by the calendar control, clear 'Now' check box, show VDM, FWI map, hotspots and real-time disaster report (see 4.3.5.4) of the day specified. • When 'Now' check box is checked, show vegetation map, FWI map, hotspots and real-time disaster report of the current day, and keep updating these four real-time maps.	TRINITY	20%	04.10.2013	15.10.2013	15.10.2013
4.2.5	**Display FWI Map of the previous day until today's FWI Map becomes available**					
	a) Currently, FWI Map is not shown until a day is specified by its calendar control.	TRINITY	0%	TBD	20.11.2013	20.11.2013
	b) Modify code as follows: When 'Now' is checked (it is checked by default) FWI Map of now should be displayed. But FWI Map is created almost every day at 2pm. Therefore, it shall be displayed by the following rule. •If FWI Map of the current day exists now, display it. •Otherwise display FWI Map of one day before, if such exists. •Otherwise don't display FWI Map.	TRINITY	0%	TBD	20.11.2013	20.11.2013
4.2.6	**Relocate vegetation map's attribute selector from Layers panel to the top of FMU selector**					
	a) Currently, attribute selectors of vegetation map are located in the Layers panel for each FMU (See Appendix A.4)	TRINITY	0%	TBD	20.11.2013	20.11.2013
	b) Remove all the attribute selectors from the Layers panel.	TRINITY	0%	TBD	20.11.2013	20.11.2013
	c) Add one attribute selector to the top line of FMU selector accommodated in the FMU Tab. (See Fig. 8)	TRINITY	0%	TBD	20.11.2013	20.11.2013
	d) Modify code to apply the selected attribute to all the FMUs.	TRINITY	0%	TBD	20.11.2013	20.11.2013
4.3	**Add New Layers / Improve Layers**					
4.3.1	**Improve Vegetation map Layer by including National Parks**					
	a) Shape files for three national parks will be provided from PURCHASER/USER.	TRINITY	0%	TBD	20.11.2013	20.11.2013

	b) Classification of species of National parks is not compatible to PEMF classification. So, Classification shall be converted to be compatible to PEMF's according to direction of PURCHASER/USER.	TRINITY	0%	TBD	20.11.2013	20.11.2013
	c) Add each National park FMU polygon as a member of PEMF FMU group.	TRINITY	0%	TBD	20.11.2013	20.11.2013
4.3.2	**Improve Vegetation map Layer by including Protected area Zone 1**					
	a) Shape files for Protected area Zone 1 will be provided from PURCHASER/USER. They don't contain attributes.	TRINITY	0%	TBD	30.11.2013	30.11.2013
	b) Add each Protected area Zone 1 polygon as a member of PEMF FMU group.	TRINITY	0%	TBD	30.11.2013	30.11.2013
4.3.3	**Add a New Layer for MGRS Grid**					
	a) Add MGRS grid.	TRINITY	0%	TBD	30.11.2013	30.11.2013
	b) Idea of implementation of MGRS grid can be obtained from http://dhost.info/usngweb/ (* definition of MGRS grid is different from definition of U.S. National Grid)	TRINITY	0%	TBD	30.11.2013	30.11.2013
	c) Definition of MGRS Grid can be obtained from http://earth-info.nga.mil/GandG/coordsys/grids/mgrs.doc	TRINITY	0%	TBD	30.11.2013	30.11.2013
	d) Suitable grids according to current zoom-in factor shall be selectable from Zone, 100km, 10km, 1km, 100m and 10m.	TRINITY	0%	TBD	30.11.2013	30.11.2013
4.3.4	**Add a new Layer "Damage Forest Value Map"**					
	a) Add a user privilege to enable/disable to access this map. When this layer is selected following functions shall be enabled.	TRINITY	0%	TBD	30.11.2013	30.11.2013
	b) Allow users to draw a polygon	TRINITY	0%	TBD	30.11.2013	30.11.2013
	c) Find intersections of the drawn polygon and subcompartments	TRINITY	0%	TBD	30.11.2013	30.11.2013

	d) As table form, the following data shall be shown for the intersected area: • CompartmentNo./SubCompartmentNo. • Intersected Area (ha) • Total Area of Subcompartment (ha) This value should be taken from Form9 of Inventory for corresponding subcompartment • % of intersected area over total area of subcompartment This value should be calculated by Intersected Area / total area of subcompartment x 100 • Value for the intersected area This value should be calculated as Value of Forest x % of intersected area where Value of Forest area shall be taken from corresponding field in Form 9 of Inventory • Total Value for the intersected areas	TRINITY	0%	TBD	30.11.2013	30.11.2013	
	e) Result intersection polygons shall be displayed in this layer with a color classification according to the total value for the intersected areas. User shall provide classification of colors by value.	TRINITY	0%	TBD	30.11.2013	30.11.2013	
4.3.5	**Add new layer group – CMC Operation Maps**						
4.3.5	**a)** Add a user privilege to enable/disable to access this Layer group.	TRINITY	0%	TBD	30.11.2013	30.11.2013	
	b) When this layer group is selected, user is allowed to draw a polygon which is used for inner polygon searches enabled by corresponding inner polygon search switches. (see Fig.6-A)	TRINITY	0%	TBD	30.11.2013	30.11.2013	
	c) State of inner polygon search switches shall be kept in a table with a relation to the user account, and when the user logs in again, the state shall be restored.	TRINITY	0%	TBD	30.11.2013	30.11.2013	
	d) The node of "CMC Operation Maps" shall be expanded by default.	TRINITY	0%	TBD	30.11.2013	30.11.2013	
4.3.5.1	**Add a "Resource Map" Layer**						

	a) Create and display resource icons corresponding to resource types at the coordinates specified in resource records from UNDP Database. (See Appendix B-1)	TRINITY	0%	TBD	30.11.2013	30.11.2013
	b) This is not a permanent map. Successful PROPOSER shall write code to create and replace the map once a month.	TRINITY	0%	TBD	30.11.2013	30.11.2013
	c) Add function for optional inner polygon search. Breakdown of resources in the drawn polygon shall be displayed as a table in the search result pane.	TRINITY	0%	TBD	30.11.2013	30.11.2013
4.3.5.2	**Add a "Facility inventory Map" Layer**					
	a) Create and display facility inventory icons corresponding to facility types at the coordinates specified in facility inventory records from UNDP Database. (See Appendix B-1)	TRINITY	0%	TBD	30.11.2013	30.11.2013
	b) This is not a permanent map. Successful PROPOSER shall write code to create and replace the map once a month.	TRINITY	0%	TBD	30.11.2013	30.11.2013
	c) Add function for optional inner polygon search. Breakdown of facility inventory in the drawn polygon shall be displayed as a table in the search result pane.	TRINITY	0%	TBD	30.11.2013	30.11.2013
4.3.5.3	**Add a "Demographic Map" Layer**					
	a) Show a thematic map showing total population by color classification using border of settlements.	TRINITY	0%	TBD	30.11.2013	30.11.2013
	b) This is not a permanent map. Successful PROPOSER shall write code to create and replace the map once a month.	TRINITY	0%	TBD	30.11.2013	30.11.2013
	c) Demographic information will be in a database to be created by UNDP which will become accessible from MKFFIS in mid July 2013. (see Appendix B-2)	TRINITY	0%	TBD	30.11.2013	30.11.2013
	d) Add function for optional inner polygon search. Breakdown of total population of each settlement which is intersected by the drawn polygon shall be displayed in the search result pane.	TRINITY	0%	TBD	30.11.2013	30.11.2013

	Real-time disaster report from RCMC					
	a) Add a user privilege to enable/disable this function	TRINITY	30%	05.10.2013	01.11.2013	01.11.2013
	b) Users having this privilege are able to send/edit/delete disaster report. Report consists of followings. • Geographic information (polygon, line, point, icon) drawn/dropped on the MKFFIS Map Pane • Text information (Details shall be decided by USER)	TRINITY	30%	05.10.2013	01.11.2013	01.11.2013
	c) Disaster report sent shall be stored in Disaster Report Database. (Successful PROPOSER shall prepare this database).	TRINITY	30%	05.10.2013	01.11.2013	01.11.2013
4.3.5.4	**d)** The report sent, edited, deleted shall be reflected in real time to all the MKFFIS users who are online.	TRINITY	30%	05.10.2013	01.11.2013	01.11.2013
	e) Geographic information sent shall be displayed as a Real-time disaster Map which is one member layer of the CMC Operation Maps. (see Fig.6-A)	TRINITY	30%	05.10.2013	01.11.2013	01.11.2013
	f) Alarm message shall be displayed upon arrival of real-time disaster report. (In a message box for example)	TRINITY	30%	05.10.2013	01.11.2013	01.11.2013
	g) Salvage as much data as possible from ESRI Application created on ArcSDE (see APPENDIX C). Source code is not available for ESRI Application, but user account of ArcSDE database (MSSQL) will be provided.	TRINITY	0%	TBD	01.11.2013	01.11.2013
	h) If type of disaster is forest fire; create a new CMC Forest Fire Report. (Refer to 4.6.1)	TRINITY	0%	TBD	01.11.2013	01.11.2013
	Search disaster reports					
4.3.5.5	**a)** Add a panel for this search in the second menu item of the accordion menu in Search tab. (see Fig. 10)	TRINITY	0%	TBD	30.11.2013	30.11.2013
	b) Only the filter by CMC classification is required. PEMF classification is not necessary.	TRINITY	0%	TBD	30.11.2013	30.11.2013

	c) Search disaster report panel has following controls: • From Date • To Date • GCUK unit selector • RCUK unit selector • Municipality and Settlement selector • Type of events • Search Report button • Clear Result button • Print Result button	TRINITY	0%	TBD	30.11.2013	30.11.2013
	d) Search result shall be shown in the search result pane.	TRINITY	0%	TBD	30.11.2013	30.11.2013
	e) Color of GCUK or RCUK polygons shall be classified by the number of disasters in the polygons in the specified period.	TRINITY	0%	TBD	30.11.2013	30.11.2013
	f) Result Map shall be displayed as a 'Disaster search result' which is one member layer of the CMC Operation Maps. (see Fig.6-A)	TRINITY	0%	TBD	30.11.2013	30.11.2013
	g) As for Print Result function, format of printed report shall be provided by USER.	TRINITY	0%	TBD	30.11.2013	30.11.2013
4.4	**Add New Functions to MKFFIS**					
4.4.1	**Grid Inforamtion**					

	a) Show following information of a MGRS Grid clicked. • MGRS Grid code • Summary of resources in the grid (see Appendix B-1). Resources are in a database created by UNDP which is accessible from MKFFIS. • Summary of disaster events in the grid. Disaster events are in a database created by UNDP which is accessible from MKFFIS. • Summary of facility inventories in the grid. Inventories are in a database created by UNDP which is accessible from MKFFIS. • FWI at the center of the grid. FWI grid values are kept as GeoTIFF image. • ⬜ Vegetation dryness at the center of the grid. Vegetation dryness grid values are kept as GetTIFF image.	TRINITY	0%	TBD	30.11.2013	30.11.2013
	Demographic information					
4.4.2	**a)** Show demographic information of an administrative area clicked (National, Municipalities, Settlements). When info button is clicked, show summary, and detail table representation to be shown below on the screen.	TRINITY	0%	TBD	30.11.2013	30.11.2013
	b) Demographic information will be in a database to be created by UNDP which will become accessible from MKFFIS in mid July 2013.	TRINITY	0%	TBD	30.11.2013	30.11.2013
	c) Demographic information to be shown on the info button and detailed table will be decided by USER.	TRINITY	0%	TBD	30.11.2013	30.11.2013
4.4.3	**Add means to switch Between MKFFIS for internal purpose and MKFFIS for Public**					

	a) Currently, MKFFIS serves for internal purpose controlling available features by user account. But another instance of MKFFIS will be installed on the Internet Server to serve public users. MKFFIS for Public can be opened without login process, but much stronger restriction will be applied. Successful PROPOSER shall add means to switch from MKFFIS for internal purpose to MKFFIS for Public. Following procedure is an example of solution. • Define a special user GUEST. • Restriction to the public user will be applied by privilege settings of user GUEST. • Add necessary exceptions applicable to GUEST user. For example, user profile of GUEST user is not kept . • Prepare PUBLIC flag in a configuration file of MKFFIS GIS. • If the flag is OFF, MKFFIS starts normally from the login page. • VI. If the flag is ON, MKFFIS skips login page and starts from the main page, setting user name to GUEST automatically.	TRINITY	0%	TBD	30.11.2013	30.11.2013
	b) Link to MKFFIS for internal purpose shall be added to the MKFFIS for public.	TRINITY	0%	TBD	30.11.2013	30.11.2013
4.4.4	**Add function to fill section 5.1 in *P2* report taking meteorological data from AWS.**					
	a) Add an AWS select box next to the 'Meteorological Station' text box. (See Fig..11) AWS Names in the select box shall be taken dynamically from the 'meteorologicalstations' table in the CUK database.	SIMT	80%	25.09.2013	09.10.2013	09.10.2013
	b) Search the meteorological data of the selected AWS which is closest to the date/time specified in the '2.2 Detection' text box.	SIMT	80%	25.09.2013	09.10.2013	09.10.2013

	c) If there is no data between 3 hours before and after the date/time specified by the '2.2 Detection' text box, show message 'No AWS data available' and do nothing to the textboxes, otherwise fill following textboxes in the section 5.1 of P2 report. • Meteorological Station: (name of meteorological station) • hour: (hour of the meteorological data measured) • Number of days from last raining: (to fill this box some calculation is necessary) • Maximum temperature: (fill maximum temperature of the specified day) • Relative humidity • Wind Speed • Direction (Wind direction)	SIMT	80%	TBD	09.10.2013	09.10.2013	
	Changes requested from Damages deparment from CMC about forest fire report	SIMT	80%	03.10.2013	09.10.2013	09.10.2013	
4.5	**Add New Functions/Interface to GFIS**						
	Add a link to user manual						
4.5.1	**a)** Add a link to end user manual of GFIS GIS to the tool bar.	JICA					
	b) Add a link to end user manual of GFIS Planning to the top link.	JICA					
	c) Add a link to end user manual of GFIS Fire Report to the top link.	JICA					
	d) In English mode link to the user manual of English version, and In Macedonian mode link to the user manual of Macedonian version.	JICA					
4.5.2	**Limit available FMU by user privilege**						
	a) Add a function to the GFIS Admin page in order to specify FMUs under responsibility of each user.	TRINITY	0%	TBD	30.11.2013	30.11.2013	
	b) Limit FMUs to display and/or edit according to above privilege.	TRINITY	0%	TBD	30.11.2013	30.11.2013	

	c) Limit FMUs shown in the FMU Selector according to above privilege.	TRINITY	0%	TBD	30.11.2013	30.11.2013
	d) Zoom in FMU under responsibility of the user when that user opens GFIS GIS.	TRINITY	0%	TBD	30.11.2013	30.11.2013
4.5.3	**Allow access to past versions of forest plan.**					
	a) Currently, if a FMU polygon is edited and uploaded, old FMU polygons will be replaced by new FMU polygons. Therefore only the latest FMUs can be seen on GFIS GIS. Successful PROPOSER under the direction of PEMF shall add function to show FMUs in a past date specified by a calendar control. Following procedures are just an example of solution: • Add a calendar control to a suitable place on GFIS GIS. • Add attributes (effective from, expired on) to each FMU. • Preset some past date such as 1900.01.01 to 'effective from' and NULL to 'expired on'. • When a new FMU is uploaded, keep the old FMU and set its 'expired on' to the updated date. • Set the updated date to the new FMU's 'effective from' and set NULL to 'expired on'. • When a past date is specified, display FMUs according to their attribute 'effective from' and 'expired on'.	TRINITY	0%	TBD	30.11.2013	30.11.2013
4.5.4	**Search FMU by year of expiry of special plan**					
	a) Each FMU has its planning effective for ten years. And the duration is kept in the forest planning database. Successful PROPOSER under the direction of PEMF shall add a function to search FMUs which special plans expire in the year specified.	TRINITY SIMT	0% 0%	TBD 01.12.2013	30.11.2013 TBD	30.11.2013 20.12.2013
4.5.5	**Change monthly input to daily for form 3, 3a and 5**	SIMT	15.10.2013	TBD	25.10.2013	

	a) Currently, data entry to the form 3, 3a and 5 is carried out on a monthly basis. Successful PROPOSER under the direction of PEMF shall modify the code to cater to daily data entry. And add two options to the print function for these forms, one is daily summary, the other is monthly summary.	SIMT	0%	15.10.2013	TBD	25.10.2013
4.5.6	**Keep annual achievement for 10 years in Form 6**					
4.5.6	**a)** Successful PROPOSER under the direction of PEMF shall modify code and design of Form 6 data entry sheet to keep annual achievement for 10 years for each sub compartment. Items to keep are as follows. • Area (ha) • Number of seedlings • Weight of seeds (kg)	SIMT	0%	26.10.2013	TBD	31.10.2013
4.5.7	**Keep annual achievement for 10 years in Form *8***					
4.5.7	**a)** Successful PROPOSER under the direction of PEMF shall modify code and design of Form 8 data entry sheet to keep annual achievement for 10 years for each sub compartment. Items to keep are as follows. • Length of roads (km) • Cleared wood (m3)	SIMT	0%	01.11.2013	TBD	06.11.2013
4.5.8	**Fill area in Form 1 taken from polygon attribute**					
4.5.8	**a)** Successful PROPOSER under the direction of PEMF shall modify code of Form 1 data entry sheet to fill area automatically taken from the attribute of polygon corresponding to selected sub compartment.	SIMT	0%	20.11.2013	TBD	01.12.2013
4.5.9	**Add National and Regional office level summaries to the reports in Reports/Rekapitulari menu.**					
4.5.9	**a)** Currently, reports under the Reports/Rekapitulari menu are summary of selected FMU. Successful PROPOSER under the direction of PEMF shall add summary of National level and Regional Office level, and add links to corresponding summaries in the menu.	JICA				

	b) FMUs shall be classified by regional office in order to create regional office summary.	SIMT	5%	03.10.2013	TBD	20.10.2013
6.	**Improvement related to MKFFIS & GFIS modules**					
4.6.1	Modify PEMF Fire Report inpu t module to report by fire.					
	a) Currently fire report is created in PEMF by each sub compartment even in case of one big fire over several compartments. On the other hand, in the CMC fire report (P2 report) is fire based, not sub compartment based. Therefore, a fire report divided into several reports by sub compartment must be merged at CMC to create P2 report for one fire. There are some complaints in PEMF for this process. • PEMF does not want redundant data entry. For example, some common fields such as start of fire and end of fire should be entered repeatedly for each related sub compartment. • PEMF has authority to identify a fire over several sub compartments, therefore merging reports by sub compartment into one fire report should be conducted by PEMF. • Fire report from PEMF does not have to be by sub compartment. Report by fire is acceptable.	SIMT	0%	06.11.2013	TBD	25.11.2013
	b) Because P2 report module has a function to manage a report containing information of multiple sub compartments, applying the same approach to the PEMF fire report will be an elegant solution.	SIMT	0%	06.11.2013	TBD	25.11.2013

	c) Successful PROPOSER under direction of USER shall conduct following modification. • Modify current PEMF fire report module on GFIS Fire Report so that it can report by fire by adding functionality to manage information from multiple sub compartments. • Remove MERGE PEMF REPORT function from P2 report module in MKFFIS Fire Report. • Add IMPORT PEMF REPORT function to MKFFIS Fire Report • Adjust P2 Report module on MKFFIS Fire Report to be able to show correctly the Fire report which was imported from PEMF REPORT • Rename P2 Report as CMC Forest Fire Report. • Add 'read-only' user privilege to GFIS Fire Report and MKFFIS Fire Report which allows MKFFIS user to browse PEMF fire report, and allows GFIS user to browse CMC Fire Report. • Printing format of PEMF Fire Report to obtain approval of SiFH shall not be changed.	SIMT	0%	06.11.2013	TBD	25.11.2013
7.	**Performance Tuning**						
	Performance tuning of MKFFIS		10%				
4.7.1	**a)** Currently, there are following complaints about speed. • MKFFIS GIS takes very long time to show the login page, if it is accessed over a long distance. For example, accessing from Japan, it takes 90 seconds to open the login page and another 90 • Speed to show FMUs is slow, and from time to time it fails to show them.	TRINITY	30%	02.10.2013	25.10.2013	25.10.2013
	b) MKFFIS GIS shall be optimized by execution speed.	TRINITY	30%	02.10.2013	25.10.2013	25.10.2013

	c) Optimization is not limited to source code level. All the possible factors shall be taken into account. For example, server configuration, deployment of files, network structure, use of external servers (Google server for jQuery), indexing of tables in databases, etc.	TRINITY	10%	02.10.2013	25.10.2013	25.10.2013
	d) Improvement of performance should be shown quantitatively.	TRINITY	15%	02.10.2013	25.10.2013	25.10.2013
4.7.2	**Performance tuning of GFIS**					
	a) Currently, there are following complaints about speed which are similar to MKFFIS GIS. • GFIS GIS takes very long time to show the login page, if it is accessed over a long distance. • Speed to show FMUs is slow, and from time to time it fails to show them.	TRINITY	0%	25.10.2013	05.11.2013	05.11.2013
	b) GFIS GIS shall be optimized by execution speed	TRINITY	0%	25.10.2013	05.11.2013	05.11.2013
	c) Optimization is not limited to source code level. All the possible factors shall be taken into account. For example, server configuration, deployment of files, network structure, use of external servers (Google server for jQuery), indexing of tables in databases, etc.	TRINITY	0%	25.10.2013	05.11.2013	05.11.2013
	d) Improvement of performance should be shown quantitatively.	TRINITY	0%	25.10.2013	05.11.2013	05.11.2013
8.	**Installation/QA/Training/Documentation**					
4.8.1	MKFFIS and GIS Installation, Quality Assurance, Training, Documentation					
4.8.2	GFIS and GIS Installation, Quality Assurance, Training, Documentation					

4.2 Improve MKFFIS User Interface

4.2.1 The functionality of the tree view has been completed. It reads and creates it dynamically from a postgresql database table. The only thing remaining is to link the administrators panel with the database and create new and improved form for entering the layers.

4.2.3 The calendar control function is under development. For the hotspot maps the plan is to publish all of the information in one shape file per hotspot map and the viewing will be filter based (from the attribute date in each of the layers).

4.3 Add New Layers / Improve Layers

4.3.1 Improve Vegetation map Layer by including National Parks TRINITY
Target: MKFFIS GIS and GFIS GIS
We are waiting for the shape files of the National Parks so that we can implement them in the database and the Geoserver.

4.3.5.4 Real-time disaster report from RCMC TRINITY & SIMT
Target: MKFFIS GIS
A draft version for the Disaster report event and reports has been created. The information in the database is currently only for the fire events. A closer look should be cast in Thursday's meeting for the appropriate format of entering the data and functionality.

4.4 Add New Functions to MKFFIS

4.4.4 Add function to fill section 5.1 in P2 report taking meteorological data from AWS. SIMT
Target: MKFFIS Fire Report
This functionality is done with programing and internal testing. Demo version is on test server at CMC.

4.5 Add New Functions/Interface to GFIS

4.5.4 Search FMU by year of expiry of special plan TRINITY & SIMT
Target: GFIS GIS

4.5.5 Change monthly input to daily for form 3, 3a and 5 SIMT
Target: GFIS Planning

4.5.6 Keep annual achievement for 10 years in Form 6 SIMT
Target: GFIS Planning

4.5.7 Keep annual achievement for 10 years in Form 8 SIMT
Target: GFIS Planning

4.5.8 Fill area in Form 1 taken from polygon attribute SIMT
Target: GFIS Planning

4.5.9 Add National and Regional office level summaries to the reports in Reports/Rekapitulari menu. SIMT
Target: GFIS Planning

These reports are done for Macedonian version – with testing:
   1. *Composition of plantations report*

   2. *Form of cultivation report*

3. *Economy class report*

4. *Growing ratio report*

5. *Place of growth report*

6. *Within report*

7. *Aspect report*

It can be seen at test server at CMC.

4.6 Improvement related to both MKFFIS and GFIS modules

4.6.1 Modify PEMF Fire Report input module to report by fire. SIMT

4.7.1 Trinity extensively works on finding ways of fixing the performance issues. Unnecessary scripts are being deleted, performance tuning on the loading of the layers is done, external loading of the scripts is done etc.

- SD 2 -

WEEKLY PROGRESS REPORT   No.3
For period from October 9th to October 16th, 2013

Author: EDUSOFT, SIMT, TRINITY

Creation Date: October 16th, 2013

Seq.No	Task Description	Assignee	Current % of progress	Start Date	End Date	Target date
4.2	**Improve MKFFIS User Inteface**					
	Reform MKFFIS Left pane					
	a) Remove Accordion menu, Navigation and Layers button from the left pane.	TRINITY	90%	02.10.2013	18.10.2013	10.10.2013
	b) Add Tab control with five tabs.	TRINITY	90%	02.10.2013	18.10.2013	10.10.2013
	c) Deploy Layers panel in the first tab named 'Layers'. This tab should be a default. (See Fig. 7)	TRINITY		02.10.2013	18.10.2013	10.10.2013
4.2.1	**d)** Deploy Map Selector in the second tab named 'Maps'. Show hierarchy of each map using a tree view control, except vegetation map. Show only the root node for vegetation map in the tree view. (See Fig.6) Because vegetation map has a lot of FMUs as its children, FMU selector should be accommodated in a separate tab (e). (See Fig. 8)	TRINITY	90%	02.10.2013	26.10.2013	10.10.2013
	e) Deploy FMU selector in the third tab named 'FMU'. (See Fig. 8)	TRINITY	90%	02.10.2013	18.10.2013	10.10.2013
	f) Deploy an accordion menu with two menu items in the fourth tab named 'Search'. Deploy Search Forest History panel in the first accordion menu item. (See Fig. 10)	TRINITY	40%	02.10.2013	18.10.2013	10.10.2013
	g) Deploy AWS Overview panel in the fifth tab named 'AWS'. (See Fig. 9)	TRINITY	40%	02.10.2013	18.10.2013	10.10.2013
	h) Tab names should be displayed in the language specified by the current language mode.	TRINITY	0%	02.10.2013	18.10.2013	10.10.2013
	i) Layer settings in the Layers panel (Order of the layers, selected maps) and selected maps in the Map Selector and FMU selector shall be kept in a table with a relation to the user account, and when the user logs in again, the settings shall be restored.	TRINITY	0%	TBD	20.11.2013	20.11.2013
4.2.2	**Add a link to user manual**		%			
	a) Add a link to end user manual of MKFFIS GIS to the tool bar.	jica	0%	TBD	20.11.2013	20.11.2013

	b) Add a link to end user manual of MKFFIS Fire Report to the top link.	jica	0%	TBD	20.11.2013	20.11.2013
	c) In English mode link to the user manual of English version, and In Macedonian mode link to the user manual of Macedonian version.	jica	0%	TBD	20.11.2013	20.11.2013
4.2.3	**Change background image seasonally**		%			
	a) Change background image on the login page seasonally. Image for each season will be provided by USER.		80%	TBD	20.11.2013	20.11.2013
4.2.4	**Add a common calendar control**					
	a) Currently, vegetation dryness map (VDM) and FWI map have their own calendar control independently. And each hotspot (Seviri, Modis and Modis raw) has selections of 1 day ago, 2 days ago and 3 days ago.	TRINITY	60%	.04.10.2013	26.10.2013	15.10.2013
	b) Remove the calendar control for VDM and FWI map.	TRINITY	60%	04.10.2013	26.10.2013	15.10.2013
	c) Remove the hot spot selections: 1 day ago, 2 days ago and 3 days ago.	TRINITY	60%	04.10.2013	26.10.2013	15.10.2013
	d) Rename hot spot selections: 'Seviri (Today)' as 'Seviri', 'Modis (Today)' as 'Modis'.	TRINITY	60%	04.10.2013	26.10.2013	15.10.2013
	e) Add a calendar control with label 'Date' on the space where currently 'Navigation' is there. (See Fig. 7)	TRINITY	60%	TBD	26.10.2013	20.11.2013
	f) Add a check box with label 'Now' next to the above calendar control. 'Now' shall be checked by default. *Labels should be in the language specified by current language mode.	TRINITY	60%	TBD	26.10.2013	20.11.2013
	g) Modify code as follows: • When a past day is specified by the calendar control, clear 'Now' check box, show VDM, FWI map, hotspots and real-time disaster report (see 4.3.5.4) of the day specified. • When 'Now' check box is checked, show vegetation map, FWI map, hotspots and real-time disaster report of the current day, and keep updating these four real-time maps.	TRINITY	20%	04.10.2013	26.10.2013	15.10.2013

4.2.5	**Display FWI Map of the previous day until today's FWI Map becomes available**					
	a) Currently, FWI Map is not shown until a day is specified by its calendar control.	TRINITY	0%	TBD	26.10.2013	20.11.2013
	b) Modify code as follows: When 'Now' is checked (it is checked by default) FWI Map of now should be displayed. But FWI Map is created almost every day at 2pm. Therefore, it shall be displayed by the following rule. •If FWI Map of the current day exists now, display it. •Otherwise display FWI Map of one day before, if such exists. •Otherwise don't display FWI Map.	TRINITY	0%	TBD	26.10.2013	20.11.2013
4.2.6	**Relocate vegetation map's attribute selector from Layers panel to the top of FMU selector**					
	a) Currently, attribute selectors of vegetation map are located in the Layers panel for each FMU (See Appendix A.4)	TRINITY	0%	TBD	20.11.2013	20.11.2013
	b) Remove all the attribute selectors from the Layers panel.	TRINITY	0%	TBD	20.11.2013	20.11.2013
	c) Add one attribute selector to the top line of FMU selector accommodated in the FMU Tab. (See Fig. 8)	TRINITY	0%	TBD	20.11.2013	20.11.2013
	d) Modify code to apply the selected attribute to all the FMUs.	TRINITY	0%	TBD	20.11.2013	20.11.2013
4.3	**Add New Layers / Improve Layers**					
4.3.1	**Improve Vegetation map Layer by including National Parks**					
	a) Shape files for three national parks will be provided from PURCHASER/USER. (*Related data set cleaning in progress by SIMT)	TRINITY	0%	TBD	20.11.2013	20.11.2013

	b) Classification of species of National parks is not compatible to PEMF classification. So, Classification shall be converted to be compatible to PEMF's according to direction of PURCHASER/USER. (*Related classification of species in progress by SIMT)	TRINITY	0%	TBD	20.11.2013	20.11.2013
	c) Add each National park FMU polygon as a member of PEMF FMU group.	TRINITY	0%	TBD	20.11.2013	20.11.2013
4.3.2	**Improve Vegetation map Layer by including Protected area Zone 1**					
	a) Shape files for Protected area Zone 1 will be provided from PURCHASER/USER. They don't contain attributes.	TRINITY	0%	TBD	30.11.2013	30.11.2013
	b) Add each Protected area Zone 1 polygon as a member of PEMF FMU group.	TRINITY	0%	TBD	30.11.2013	30.11.2013
4.3.3	**Add a New Layer for MGRS Grid**					
	a) Add MGRS grid.	TRINITY	0%	TBD	30.11.2013	30.11.2013
	b) Idea of implementation of MGRS grid can be obtained from http://dhost.info/usngweb/ (* definition of MGRS grid is different from definition of U.S. National Grid)	TRINITY	0%	TBD	30.11.2013	30.11.2013
	c) Definition of MGRS Grid can be obtained from http://earth-info.nga.mil/GandG/coordsys/grids/mgrs.doc	TRINITY	0%	TBD	30.11.2013	30.11.2013
	d) Suitable grids according to current zoom-in factor shall be selectable from Zone, 100km, 10km, 1km, 100m and 10m.	TRINITY	0%	TBD	30.11.2013	30.11.2013
4.3.4	**Add a new Layer "Damage Forest Value Map"**					
	a) Add a user privilege to enable/disable to access this map. When this layer is selected following functions shall be enabled.	TRINITY	0%	TBD	30.11.2013	30.11.2013
	b) Allow users to draw a polygon	TRINITY	0%	TBD	30.11.2013	30.11.2013
	c) Find intersections of the drawn polygon and subcompartments	TRINITY	0%	TBD	30.11.2013	30.11.2013

	d) As table form, the following data shall be shown for the intersected area: • CompartmentNo./SubCompartmentNo. • Intersected Area (ha) • Total Area of Subcompartment (ha) This value should be taken from Form9 of Inventory for corresponding subcompartment • % of intersected area over total area of subcompartment This value should be calculated by Intersected Area / total area of subcompartment x 100 • Value for the intersected area This value should be calculated as Value of Forest x % of intersected area where Value of Forest area shall be taken from corresponding field in Form 9 of Inventory • Total Value for the intersected areas	TRINITY	0%	TBD	30.11.2013	30.11.2013
	e) Result intersection polygons shall be displayed in this layer with a color classification according to the total value for the intersected areas. User shall provide classification of colors by value.	TRINITY	0%	TBD	30.11.2013	30.11.2013
4.3.5	**Add new layer group – CMC Operation Maps**					
4.3.5	**a)** Add a user privilege to enable/disable to access this Layer group.	TRINITY	0%	TBD	30.11.2013	30.11.2013
	b) When this layer group is selected, user is allowed to draw a polygon which is used for inner polygon searches enabled by corresponding inner polygon search switches. (see Fig.6-A)	TRINITY	0%	TBD	30.11.2013	30.11.2013
	c) State of inner polygon search switches shall be kept in a table with a relation to the user account, and when the user logs in again, the state shall be restored.	TRINITY	0%	TBD	30.11.2013	30.11.2013
	d) The node of "CMC Operation Maps" shall be expanded by default.	TRINITY	0%	TBD	30.11.2013	30.11.2013
4.3.5.1	**Add a "Resource Map" Layer**					

	a) Create and display resource icons corresponding to resource types at the coordinates specified in resource records from UNDP Database. (See Appendix B-1)	TRINITY	0%	TBD	30.11.2013	30.11.2013
	b) This is not a permanent map. Successful PROPOSER shall write code to create and replace the map once a month.	TRINITY	0%	TBD	30.11.2013	30.11.2013
	c) Add function for optional inner polygon search. Breakdown of resources in the drawn polygon shall be displayed as a table in the search result pane.	TRINITY	0%	TBD	30.11.2013	30.11.2013
4.3.5.2	**Add a "Facility inventory Map" Layer**					
	a) Create and display facility inventory icons corresponding to facility types at the coordinates specified in facility inventory records from UNDP Database. (See Appendix B-1)	TRINITY	0%	TBD	30.11.2013	30.11.2013
	b) This is not a permanent map. Successful PROPOSER shall write code to create and replace the map once a month.	TRINITY	0%	TBD	30.11.2013	30.11.2013
	c) Add function for optional inner polygon search. Breakdown of facility inventory in the drawn polygon shall be displayed as a table in the search result pane.	TRINITY	0%	TBD	30.11.2013	30.11.2013
4.3.5.3	**Add a "Demographic Map" Layer**					
	a) Show a thematic map showing total population by color classification using border of settlements.	TRINITY	0%	TBD	30.11.2013	30.11.2013
	b) This is not a permanent map. Successful PROPOSER shall write code to create and replace the map once a month.	TRINITY	0%	TBD	30.11.2013	30.11.2013
	c) Demographic information will be in a database to be created by UNDP which will become accessible from MKFFIS in mid July 2013. (see Appendix B-2)	TRINITY	0%	TBD	30.11.2013	30.11.2013
	d) Add function for optional inner polygon search. Breakdown of total population of each settlement which is intersected by the drawn polygon shall be displayed in the search result pane.	TRINITY	0%	TBD	30.11.2013	30.11.2013

	Real-time disaster report from RCMC					
	a) Add a user privilege to enable/disable this function	TRINITY	30%	05.10.2013	01.11.2013	01.11.2013
	b) Users having this privilege are able to send/edit/delete disaster report. Report consists of followings. • Geographic information (polygon, line, point, icon) drawn/dropped on the MKFFIS Map Pane • Text information (Details shall be decided by USER)	TRINITY	30%	05.10.2013	01.11.2013	01.11.2013
	c) Disaster report sent shall be stored in Disaster Report Database. (Successful PROPOSER shall prepare this database).	TRINITY	30%	05.10.2013	01.11.2013	01.11.2013
4.3.5.4	**d)** The report sent, edited, deleted shall be reflected in real time to all the MKFFIS users who are online.	TRINITY	30%	05.10.2013	01.11.2013	01.11.2013
	e) Geographic information sent shall be displayed as a Real-time disaster Map which is one member layer of the CMC Operation Maps. (see Fig.6-A)	TRINITY	30%	05.10.2013	01.11.2013	01.11.2013
	f) Alarm message shall be displayed upon arrival of real-time disaster report. (In a message box for example)	TRINITY	30%	05.10.2013	01.11.2013	01.11.2013
	g) Salvage as much data as possible from ESRI Application created on ArcSDE (see APPENDIX C). Source code is not available for ESRI Application, but user account of ArcSDE database (MSSQL) will be provided.	TRINITY	0%	TBD	01.11.2013	01.11.2013
	h) If type of disaster is forest fire; create a new CMC Forest Fire Report. (Refer to 4.6.1)	TRINITY	0%	TBD	01.11.2013	01.11.2013
	Search disaster reports					
4.3.5.5	**a)** Add a panel for this search in the second menu item of the accordion menu in Search tab. (see Fig. 10)	TRINITY	0%	TBD	30.11.2013	30.11.2013
	b) Only the filter by CMC classification is required. PEMF classification is not necessary.	TRINITY	0%	TBD	30.11.2013	30.11.2013

	c) Search disaster report panel has following controls: • From Date • To Date • GCUK unit selector • RCUK unit selector • Municipality and Settlement selector • Type of events • Search Report button • Clear Result button • Print Result button	TRINITY	0%	TBD	30.11.2013	30.11.2013
	d) Search result shall be shown in the search result pane.	TRINITY	0%	TBD	30.11.2013	30.11.2013
	e) Color of GCUK or RCUK polygons shall be classified by the number of disasters in the polygons in the specified period.	TRINITY	0%	TBD	30.11.2013	30.11.2013
	f) Result Map shall be displayed as a 'Disaster search result' which is one member layer of the CMC Operation Maps. (see Fig.6-A)	TRINITY	0%	TBD	30.11.2013	30.11.2013
	g) As for Print Result function, format of printed report shall be provided by USER.	TRINITY	0%	TBD	30.11.2013	30.11.2013
4.4	**Add New Functions to MKFFIS**					
4.4.1	**Grid Information**					

	a) Show following information of a MGRS Grid clicked. • MGRS Grid code • Summary of resources in the grid (see Appendix B-1). Resources are in a database created by UNDP which is accessible from MKFFIS. • Summary of disaster events in the grid. Disaster events are in a database created by UNDP which is accessible from MKFFIS. • Summary of facility inventories in the grid. Inventories are in a database created by UNDP which is accessible from MKFFIS. • FWI at the center of the grid. FWI grid values are kept as GeoTIFF image. • ⬚ Vegetation dryness at the center of the grid. Vegetation dryness grid values are kept as GetTIFF image.	TRINITY	0%	TBD	30.11.2013	30.11.2013
	Demographic information					
4.4.2	**a)** Show demographic information of an administrative area clicked (National, Municipalities, Settlements). When info button is clicked, show summary, and detail table representation to be shown below on the screen.	TRINITY	0%	TBD	30.11.2013	30.11.2013
	b) Demographic information will be in a database to be created by UNDP which will become accessible from MKFFIS in mid July 2013.	TRINITY	0%	TBD	30.11.2013	30.11.2013
	c) Demographic information to be shown on the info button and detailed table will be decided by USER.	TRINITY	0%	TBD	30.11.2013	30.11.2013
4.4.3	**Add means to switch Between MKFFIS for internal purpose and MKFFIS for Public**					

	a) Currently, MKFFIS serves for internal purpose controlling available features by user account. But another instance of MKFFIS will be installed on the Internet Server to serve public users. MKFFIS for Public can be opened without login process, but much stronger restriction will be applied. Successful PROPOSER shall add means to switch from MKFFIS for internal purpose to MKFFIS for Public. Following procedure is an example of solution. • Define a special user GUEST. • Restriction to the public user will be applied by privilege settings of user GUEST. • Add necessary exceptions applicable to GUEST user. For example, user profile of GUEST user is not kept . • Prepare PUBLIC flag in a configuration file of MKFFIS GIS. • If the flag is OFF, MKFFIS starts normally from the login page. • VI. If the flag is ON, MKFFIS skips login page and starts from the main page, setting user name to GUEST automatically.	TRINITY	0%	TBD	30.11.2013	30.11.2013
	b) Link to MKFFIS for internal purpose shall be added to the MKFFIS for public.	TRINITY	0%	TBD	30.11.2013	30.11.2013
4.4.4	**Add function to fill section 5.1 in *P2* report taking meteorological data from AWS.**					
	a) Add an AWS select box next to the 'Meteorological Station' text box. (See Fig..11) AWS Names in the select box shall be taken dynamically from the 'meteorologicalstations' table in the CUK database.	SIMT	90%	25.09.2013	09.10.2013	09.10.2013
	b) Search the meteorological data of the selected AWS which is closest to the date/time specified in the '2.2 Detection' text box.	SIMT	90%	25.09.2013	09.10.2013	09.10.2013

	c) If there is no data between 3 hours before and after the date/time specified by the '2.2 Detection' text box, show message 'No AWS data available' and do nothing to the textboxes, otherwise fill following textboxes in the section 5.1 of P2 report. • Meteorological Station: (name of meteorological station) • hour: (hour of the meteorological data measured) • Number of days from last raining: (to fill this box some calculation is necessary) • Maximum temperature: (fill maximum temperature of the specified day) • Relative humidity • Wind Speed • Direction (Wind direction)	SIMT	90%	25.09.2013	09.10.2013	09.10.2013
	Changes requested from Damages deparment from CMC about forest fire report	SIMT	90%	03.10.2013	09.10.2013	09.10.2013
4.5	**Add New Functions/Interface to GFIS**					
	Add a link to user manual					
	a) Add a link to end user manual of GFIS GIS to the tool bar.	JICA				
	b) Add a link to end user manual of GFIS Planning to the top link.	JICA				
4.5.1	**c)** Add a link to end user manual of GFIS Fire Report to the top link.	JICA				
	d) In English mode link to the user manual of English version, and In Macedonian mode link to the user manual of Macedonian version.	JICA				
	Limit available FMU by user privilege					
4.5.2	**a)** Add a function to the GFIS Admin page in order to specify FMUs under responsibility of each user.	TRINITY	0%	TBD	30.11.2013	30.11.2013
	b) Limit FMUs to display and/or edit according to above privilege.	TRINITY	0%	TBD	30.11.2013	30.11.2013

	c) Limit FMUs shown in the FMU Selector according to above privilege.	TRINITY	0%	TBD	30.11.2013	30.11.2013
	d) Zoom in FMU under responsibility of the user when that user opens GFIS GIS.	TRINITY	0%	TBD	30.11.2013	30.11.2013
4.5.3	**Allow access to past versions of forest plan.**					
	a) Currently, if a FMU polygon is edited and uploaded, old FMU polygons will be replaced by new FMU polygons. Therefore only the latest FMUs can be seen on GFIS GIS. Successful PROPOSER under the direction of PEMF shall add function to show FMUs in a past date specified by a calendar control. Following procedures are just an example of solution: • Add a calendar control to a suitable place on GFIS GIS. • Add attributes (effective from, expired on) to each FMU. • Preset some past date such as 1900.01.01 to 'effective from' and NULL to 'expired on'. • When a new FMU is uploaded, keep the old FMU and set its 'expired on' to the updated date. • Set the updated date to the new FMU's 'effective from' and set NULL to 'expired on'. • When a past date is specified, display FMUs according to their attribute 'effective from' and 'expired on'.	TRINITY	0%	TBD	30.11.2013	30.11.2013
4.5.4	**Search FMU by year of expiry of special plan**					
	a) Each FMU has its planning effective for ten years. And the duration is kept in the forest planning database. Successful PROPOSER under the direction of PEMF shall add a function to search FMUs which special plans expire in the year specified.	SIMT	0%	01.12.2013	TBD	20.12.2013
4.5.5	**Change monthly input to daily for form 3, 3a and 5**	SIMT	15.10.2013	25.10.2013	25.10.2013	

	a) Currently, data entry to the form 3, 3a and 5 is carried out on a monthly basis. Successful PROPOSER under the direction of PEMF shall modify the code to cater to daily data entry. And add two options to the print function for these forms, one is daily summary, the other is monthly summary.	SIMT	10%	15.10.2013	25.10.2013	25.10.2013
4.5.6	**Keep annual achievement for 10 years in Form 6**					
	a) Successful PROPOSER under the direction of PEMF shall modify code and design of Form 6 data entry sheet to keep annual achievement for 10 years for each sub compartment. Items to keep are as follows. • Area (ha) • Number of seedlings • Weight of seeds (kg)	SIMT	0%	26.10.2013	TBD	31.10.2013
4.5.7	**Keep annual achievement for 10 years in Form *8***					
	a) Successful PROPOSER under the direction of PEMF shall modify code and design of Form 8 data entry sheet to keep annual achievement for 10 years for each sub compartment. Items to keep are as follows. • Length of roads (km) • Cleared wood (m3)	SIMT	0%	01.11.2013	TBD	06.11.2013
4.5.8	**Fill area in Form 1 taken from polygon attribute**					
	a) Successful PROPOSER under the direction of PEMF shall modify code of Form 1 data entry sheet to fill area automatically taken from the attribute of polygon corresponding to selected sub compartment.	SIMT	0%	20.11.2013	TBD	01.12.2013
4.5.9	**Add National and Regional office level summaries to the reports in Reports/Rekapitulari menu.**					
	a) Currently, reports under the Reports/Rekapitulari menu are summary of selected FMU. Successful PROPOSER under the direction of PEMF shall add summary of National level and Regional Office level, and add links to corresponding summaries in the menu.	SIMT	80%			

	b) FMUs shall be classified by regional office in order to create regional office summary.	SIMT	80%	03.10.2013	TBD	20.10.2013
6.	I**mprovement related to MKFFIS & GFIS modules**					
4.6.1	Modify PEMF Fire Report inpu t module to report by fire.					
	a) Currently fire report is created in PEMF by each sub compartment even in case of one big fire over several compartments. On the other hand, in the CMC fire report (P2 report) is fire based, not sub compartment based. Therefore, a fire report divided into several reports by sub compartment must be merged at CMC to create P2 report for one fire. There are some complaints in PEMF for this process. • PEMF does not want redundant data entry. For example, some common fields such as start of fire and end of fire should be entered repeatedly for each related sub compartment. • PEMF has authority to identify a fire over several sub compartments, therefore merging reports by sub compartment into one fire report should be conducted by PEMF. • Fire report from PEMF does not have to be by sub compartment. Report by fire is acceptable.	SIMT	0%	06.11.2013	TBD	25.11.2013
	b) Because P2 report module has a function to manage a report containing information of multiple sub compartments, applying the same approach to the PEMF fire report will be an elegant solution.	SIMT	0%	06.11.2013	TBD	25.11.2013

	c) Successful PROPOSER under direction of USER shall conduct following modification. • Modify current PEMF fire report module on GFIS Fire Report so that it can report by fire by adding functionality to manage information from multiple sub compartments. • Remove MERGE PEMF REPORT function from P2 report module in MKFFIS Fire Report. • Add IMPORT PEMF REPORT function to MKFFIS Fire Report • Adjust P2 Report module on MKFFIS Fire Report to be able to show correctly the Fire report which was imported from PEMF REPORT • Rename P2 Report as CMC Forest Fire Report. • Add 'read-only' user privilege to GFIS Fire Report and MKFFIS Fire Report which allows MKFFIS user to browse PEMF fire report, and allows GFIS user to browse CMC Fire Report. • Printing format of PEMF Fire Report to obtain approval of SiFH shall not be changed.	SIMT	0%	06.11.2013	TBD	25.11.2013
7.	**Performance Tuning**						
	Performance tuning of MKFFIS		10%			
4.7.1	**a)** Currently, there are following complaints about speed. • MKFFIS GIS takes very long time to show the login page, if it is accessed over a long distance. For example, accessing from Japan, it takes 90 seconds to open the login page and another 90 • Speed to show FMUs is slow, and from time to time it fails to show them.	TRINITY	30%	02.10.2013	25.10.2013	25.10.2013
	b) MKFFIS GIS shall be optimized by execution speed.	TRINITY	30%	02.10.2013	25.10.2013	25.10.2013

	c) Optimization is not limited to source code level. All the possible factors shall be taken into account. For example, server configuration, deployment of files, network structure, use of external servers (Google server for jQuery), indexing of tables in databases, etc.	TRINITY	10%	02.10.2013	25.10.2013	25.10.2013
	d) Improvement of performance should be shown quantitatively.	TRINITY	15%	02.10.2013	25.10.2013	25.10.2013
	Performance tuning of GFIS					
4.7.2	**a)** Currently, there are following complaints about speed which are similar to MKFFIS GIS. • GFIS GIS takes very long time to show the login page, if it is accessed over a long distance. • Speed to show FMUs is slow, and from time to time it fails to show them.	TRINITY	0%	25.10.2013	05.11.2013	05.11.2013
	b) GFIS GIS shall be optimized by execution speed	TRINITY	0%	25.10.2013	05.11.2013	05.11.2013
	c) Optimization is not limited to source code level. All the possible factors shall be taken into account. For example, server configuration, deployment of files, network structure, use of external servers (Google server for jQuery), indexing of tables in databases, etc.	TRINITY	0%	25.10.2013	05.11.2013	05.11.2013
	d) Improvement of performance should be shown quantitatively.	TRINITY	0%	25.10.2013	05.11.2013	05.11.2013
8.	**Installation/QA/Training/Documentation**					
4.8.1	MKFFIS and GIS Installation, Quality Assurance, Training, Documentation					
4.8.2	GFIS and GIS Installation, Quality Assurance, Training, Documentation					

4.2 Improve MKFFIS User Interface

4.2.1 The functionality of the tree view has been completed. It reads and creates it dynamically from a postgresql database table. The only thing remaining is to link the administrators panel with the database and create new and improved form for entering the layers. The FMU selector is being applied as well as the AWS and Forest Fire History search. These two option in their full functionality should be done by 01.11.2013

4.2.3 The calendar control function is under development. For the hotspot maps the plan is to publish all of the information in one shape file per hotspot map and the viewing will be filter based (from the attribute date in each of the layers). This functionality shall be completed by 26.10.2013.

4.3 Add New Layers / Improve Layers

4.3.1 Improve Vegetation map Layer by including National Parks TRINITY
Target: MKFFIS GIS and GFIS GIS
We are waiting for the shape files of the National Parks so that we can implement them in the database and the Geoserver.

4.3.5.4 Real-time disaster report from RCMC TRINITY & SIMT
Target: MKFFIS GIS
A draft version for the Disaster report event and reports has been created. The information in the database is currently only for the fire events. A closer look should be cast in Thursday's meeting for the appropriate format of entering the data and functionality.

The reporting phase is nearly completed. We have fully completed a report for a snowfall event to be shown on Monday.
4.4 Add New Functions to MKFFIS

4.4.4 Add function to fill section 5.1 in P2 report taking meteorological data from AWS. SIMT
Target: MKFFIS Fire Report
Changes were made in the method for taking the date time of the fire – to work correct for Macedonian and English version.New version of demo is on test server.

4.5 Add New Functions/Interface to GFIS

4.5.4 Search FMU by year of expiry of special plan TRINITY & SIMT
Target: GFIS GIS

4.5.5 Change monthly input to daily for form 3, 3a and 5 SIMT
Target: GFIS Planning
New fields were added in the database, new views in the database are created and design form for form3a is created with all input fields and validations.

4.5.6 Keep annual achievement for 10 years in Form 6 SIMT
Target: GFIS Planning

4.5.7 Keep annual achievement for 10 years in Form 8 SIMT
Target: GFIS Planning

4.5.8 Fill area in Form 1 taken from polygon attribute SIMT
Target: GFIS Planning

4.5.9 Add National and Regional office level summaries to the reports in Reports/Rekapitulari menu. SIMT
Target: GFIS Planning

All reports are done, for Macedonian and English version, and we are testing if results are correct.

It can be seen at test server at CMC.

4.6 Improvement related to both MKFFIS and GFIS modules

4.6.1 Modify PEMF Fire Report input module to report by fire. SIMT

4.7.1 Trinity extensively works on finding ways of fixing the performance issues. Unnecessary scripts are being deleted, performance tuning on the loading of the layers is done, external loading of the scripts is done etc.

- SD 2 -

WEEKLY PROGRESS REPORT   No.4
For period from October 17th to October 24th, 2013

Author: EDUSOFT, SIMT, TRINITY

Creation Date: October 24th, 2013

WEEKLY PROGRESS REPORT for the period from October 17th to October 24th 2013

Seq.No	Task Description	Assignee	Current % of progress	DATES			
				Planed Start	Planed End	Contracted/ Targeted	Tested Accepted by Purchaser User
4.2	**Improve MKFFIS User Interface**						
	Reform MKFFIS Left pane						
	a) Remove Accordion menu, Navigation and Layers button from the left pane.	TRINITY	100%	02.10.2013	18.10.2013	10.10.2013	
	b) Add Tab control with five tabs.	TRINITY	100%	02.10.2013	18.10.2013	10.10.2013	
	c) Deploy Layers panel in the first tab named 'Layers'. This tab should be a default. (See Fig. 7)	TRINITY		02.10.2013	18.10.2013	10.10.2013	
4.2.1	**d)** Deploy Map Selector in the second tab named 'Maps'. Show hierarchy of each map using a tree view control, except vegetation map. Show only the root node for vegetation map in the tree view. (See Fig.6) Because vegetation map has a lot of FMUs as its children, FMU selector should be accommodated in a separate tab (e). (See Fig. 8)	TRINITY	100%	02.10.2013	26.10.2013	10.10.2013	
	e) Deploy FMU selector in the third tab named 'FMU'. (See Fig. 8)	TRINITY	100%	02.10.2013	18.10.2013	10.10.2013	
	f) Deploy an accordion menu with two menu items in the fourth tab named 'Search'. Deploy Search Forest History panel in the first accordion menu item. (See Fig. 10)	TRINITY	40%	02.10.2013	01.12.2013	01.12.2013	
	g) Deploy AWS Overview panel in the fifth tab named 'AWS'. (See Fig. 9)	TRINITY	40%	02.10.2013	01.12.2013	01.12.2013	
	h) Tab names should be displayed in the language specified by the current language mode.	TRINITY	0%	02.10.2013	31.12.2013	31.12.2013	

	i) Layer settings in the Layers panel (Order of the layers, selected maps) and selected maps in the Map Selector and FMU selector shall be kept in a table with a relation to the user account, and when the user logs in again, the settings shall be restored.	TRINITY	0%	TBD	31.12.2013	31.12.2013	
4.2.2	**Add a link to user manual**		%				
	a) Add a link to end user manual of MKFFIS GIS to the tool bar.	JICA	0%	TBD	20.11.2013	20.11.2013	
	b) Add a link to end user manual of MKFFIS Fire Report to the top link.	JICA	0%	TBD	20.11.2013	20.11.2013	
	c) In English mode link to the user manual of English version, and In Macedonian mode link to the user manual of Macedonian version.	JICA	0%	TBD	20.11.2013	20.11.2013	
4.2.3	**Change background image seasonally**		%				
	a) Change background image on the login page seasonally. Image for each season will be provided by USER.		80%	TBD	20.11.2013	20.11.2013	
4.2.4	**Add a common calendar control**						
	a) Currently, vegetation dryness map (VDM) and FWI map have their own calendar control independently. And each hotspot (Seviri, Modis and Modis raw) has selections of 1 day ago, 2 days ago and 3 days ago.	TRINITY	100%	.04.10.2013	26.10.2013	15.10.2013	
	b) Remove the calendar control for VDM and FWI map.	TRINITY	100%	04.10.2013	26.10.2013	15.10.2013	
	c) Remove the hot spot selections: 1 day ago, 2 days ago and 3 days ago.	TRINITY	60%	04.10.2013	26.10.2013	15.10.2013	
	d) Rename hot spot selections: 'Seviri (Today)' as 'Seviri', 'Modis (Today)' as 'Modis'.	TRINITY	60%	04.10.2013	26.10.2013	15.10.2013	
	e) Add a calendar control with label 'Date' on the space where currently 'Navigation' is there. (See Fig. 7)	TRINITY	100%	TBD	26.10.2013	20.11.2013	
	f) Add a check box with label 'Now' next to the above calendar control. 'Now' shall be checked by default. *Labels should be in the language specified by current language mode.	TRINITY	100%	TBD	26.10.2013	20.11.2013	

	g) Modify code as follows: • When a past day is specified by the calendar control, clear 'Now' check box, and show VDM, FWI map hotspots and real-time disaster report (see 4.3.5.4) of the day specified. • When 'Now' check box is checked, show vegetation map, FWI map, hotspots and real-time disaster report of the current day, and keep updating these four real-time maps.	TRINITY	100%	04.10.2013	26.10.2013			15.10.20 13
4.2.5	**Display FWI Map of the previous day until today's FWI Map becomes available**							
	a) Currently, FWI Map is not shown until a day is specified by its calendar control.	TRINITY	100%	TBD	26.10.2013	20.11.2013		
	b) Modify code as follows: When 'Now' is checked (it is checked by default) FWI Map of now should be displayed. But FWI Map is created almost every day at 2pm. Therefore, it shall be displayed by the following rule. •If FWI Map of the current day exists now, display it. •Otherwise display FWI Map of one day before, if such exists. •Otherwise don't display FWI Map.	TRINITY	100%	TBD	26.10.2013	20.11.2013		
4.2.6	**Relocate vegetation map's attribute selector from Layers panel to the top of FMU selector**							
	a) Currently, attribute selectors of vegetation map are located in the Layers panel for each FMU (See Appendix A.4)	TRINITY	100%	TBD	20.11.2013	20.11.2013		
	b) Remove all the attribute selectors from the Layers panel.	TRINITY	100%	TBD	20.11.2013	20.11.2013		
	c) Add one attribute selector to the top line of FMU selector accommodated in the FMU Tab. (See Fig. 8)	TRINITY	100%	TBD	20.11.2013	20.11.2013		
	d) Modify code to apply the selected attribute to all the FMUs.	TRINITY	100%	TBD	20.11.2013	20.11.2013		

4.3	**Add New Layers / Improve Layers**						
4.3.1	**Improve Vegetation map Layer by including National Parks**						
	a) Shape files for three national parks will be provided from PURCHASER/USER. (*Related data set cleaning in progress by SIMT)	TRINITY	0%	TBD	20.11.2013	20.11.2013	
	b) Classification of species of National parks is not compatible to PEMF classification. So, Classification shall be converted to be compatible to PEMF's according to direction of PURCHASER/USER. (*Related classification of species in progress by SIMT)	TRINITY	0%	TBD	20.11.2013	20.11.2013	
	c) Add each National park FMU polygon as a member of PEMF FMU group.	TRINITY	0%	TBD	20.11.2013	20.11.2013	
4.3.2	**Improve Vegetation map Layer by including Protected area Zone 1**						
	a) Shape files for Protected area Zone 1 will be provided from PURCHASER/USER. They don't contain attributes.	TRINITY	0%	TBD	30.11.2013	30.11.2013	
	b) Add each Protected area Zone 1 polygon as a member of PEMF FMU group.	TRINITY	0%	TBD	30.11.2013	30.11.2013	
4.3.3	**Add a New Layer for MGRS Grid**						
	a) Add MGRS grid.	TRINITY	0%	TBD	30.11.2013	30.11.2013	
	b) Idea of implementation of MGRS grid can be obtained from http://dhost.info/usngweb/ (* definition of MGRS grid is different from definition of U.S. National Grid)	TRINITY	0%	TBD	30.11.2013	30.11.2013	
	c) Definition of MGRS Grid can be obtained from http://earth-info.nga.mil/GandG/coordsys/grids/mgrs.doc	TRINITY	0%	TBD	30.11.2013	30.11.2013	

	d) Suitable grids according to current zoom-in factor shall be selectable from Zone, 100km, 10km, 1km, 100m and 10m.	TRINITY	0%	TBD	30.11.2013	30.11.2013	
	Add a new Layer "Damage Forest Value Map"						
	a) Add a user privilege to enable/disable to access this map. When this layer is selected following functions shall be enabled.	TRINITY	0%	TBD	30.11.2013	30.11.2013	
	b) Allow users to draw a polygon	TRINITY	100%	TBD	30.11.2013	30.11.2013	
	c) Find intersections of the drawn polygon and subcompartments	TRINITY	100%	TBD	30.11.2013	30.11.2013	
4.3.4	**d)** As table form, the following data shall be shown for the intersected area: • CompartmentNo./SubCompartment No. • Intersected Area (ha) • Total Area of Subcompartment (ha) This value should be taken from Form9 of Inventory for corresponding subcompartment • % of intersected area over total area of subcompartment This value should be calculated by Intersected Area / total area of subcompartment x 100 • Value for the intersected area This value should be calculated as Value of Forest x % of intersected area where Value of Forest area shall be taken from corresponding field in Form 9 of Inventory • Total Value for the intersected areas	TRINITY	80%	TBD	30.11.2013	30.11.2013	
	e) Result intersection polygons shall be displayed in this layer with a color classification according to the total value for the intersected areas. User shall provide classification of colors by value.	TRINITY	0%	TBD	30.11.2013	30.11.2013	
4.3.5	**Add new layer group – CMC Operation Maps**						

4.3.5	**a)** Add a user privilege to enable/disable to access this Layer group.	TRINITY	0%	TBD	30.11.2013	30.11.2013
	b) When this layer group is selected, user is allowed to draw a polygon which is used for inner polygon searches enabled by corresponding inner polygon search switches. (see Fig.6-A)	TRINITY	0%	TBD	30.11.2013	30.11.2013
	c) State of inner polygon search switches shall be kept in a table with a relation to the user account, and when the user logs in again, the state shall be restored.	TRINITY	0%	TBD	30.11.2013	30.11.2013
	d) The node of "CMC Operation Maps" shall be expanded by default.	TRINITY	0%	TBD	30.11.2013	30.11.2013
4.3.5.1	**Add a "Resource Map" Layer**					
	a) Create and display resource icons corresponding to resource types at the coordinates specified in resource records from UNDP Database. (See Appendix B-1)	TRINITY	0%	TBD	30.11.2013	30.11.2013
	b) This is not a permanent map. Successful PROPOSER shall write code to create and replace the map once a month.	TRINITY	0%	TBD	30.11.2013	30.11.2013
	c) Add function for optional inner polygon search. Breakdown of resources in the drawn polygon shall be displayed as a table in the search result pane.	TRINITY	0%	TBD	30.11.2013	30.11.2013
4.3.5.2	**Add a "Facility inventory Map" Layer**					
	a) Create and display facility inventory icons corresponding to facility types at the coordinates specified in facility inventory records from UNDP Database. (See Appendix B-1)	TRINITY	0%	TBD	30.11.2013	30.11.2013
	b) This is not a permanent map. Successful PROPOSER shall write code to create and replace the map once a month.	TRINITY	0%	TBD	30.11.2013	30.11.2013

	c) Add function for optional inner polygon search. Breakdown of facility inventory in the drawn polygon shall be displayed as a table in the search result pane.	TRINITY	0%	TBD	30.11.2013	30.11.2013	
	Add a "Demographic Map" Layer						
	a) Show a thematic map showing total population by color classification using border of settlements.	TRINITY	0%	TBD	30.11.2013	30.11.2013	
	b) This is not a permanent map. Successful PROPOSER shall write code to create and replace the map once a month.	TRINITY	0%	TBD	30.11.2013	30.11.2013	
4.3.5.3	**c)** Demographic information will be in a database to be created by UNDP which will become accessible from MKFFIS in mid July 2013. (see Appendix B-2)	TRINITY	0%	TBD	30.11.2013	30.11.2013	
	d) Add function for optional inner polygon search. Breakdown of total population of each settlement which is intersected by the drawn polygon shall be displayed in the search result pane.	TRINITY	0%	TBD	30.11.2013	30.11.2013	
	Real-time disaster report from RCMC						
	a) Add a user privilege to enable/disable this function	TRINITY	60%	05.10.2013	01.11.2013	01.11.2013	
4.3.5.4	**b)** Users having this privilege are able to send/edit/delete disaster report. Report consists of followings. • Geographic information (polygon, line, point, icon) drawn/dropped on the MKFFIS Map Pane • Text information (Details shall be decided by USER)	TRINITY	60%	05.10.2013	01.11.2013	01.11.2013	
	c) Disaster report sent shall be stored in Disaster Report Database. (Successful PROPOSER shall prepare this database).	TRINITY	60%	05.10.2013	01.11.2013	01.11.2013	
	d) The report sent, edited, deleted shall be reflected in real time to all the MKFFIS users who are online.	TRINITY	60%	05.10.2013	01.11.2013	01.11.2013	

	e) Geographic information sent shall be displayed as a Real-time disaster Map which is one member layer of the CMC Operation Maps. (see Fig.6-A)	TRINITY	60%	05.10.2013	01.11.2013	01.11.2013	
	f) Alarm message shall be displayed upon arrival of real-time disaster report. (In a message box for example)	TRINITY	60%	05.10.2013	01.11.2013	01.11.2013	
	g) Salvage as much data as possible from ESRI Application created on ArcSDE (see APPENDIX C). Source code is not available for ESRI Application, but user account of ArcSDE database (MSSQL) will be provided.	TRINITY	0%	TBD	01.11.2013	01.11.2013	
	h) If type of disaster is forest fire; create a new CMC Forest Fire Report. (Refer to 4.6.1)	TRINITY	0%	TBD	01.11.2013	01.11.2013	
	Search disaster reports						
	a) Add a panel for this search in the second menu item of the accordion menu in Search tab. (see Fig. 10)	TRINITY	0%	TBD	30.11.2013	30.11.2013	
	b) Only the filter by CMC classification is required. PEMF classification is not necessary.	TRINITY	0%	TBD	30.11.2013	30.11.2013	
4.3.5.5	**c)** Search disaster report panel has following controls: • From Date • To Date • GCUK unit selector • RCUK unit selector • Municipality and Settlement selector • Type of events • Search Report button • Clear Result button • Print Result button	TRINITY	0%	TBD	30.11.2013	30.11.2013	
	d) Search result shall be shown in the search result pane.	TRINITY	0%	TBD	30.11.2013	30.11.2013	

	e) Color of GCUK or RCUK polygons shall be classified by the number of disasters in the polygons in the specified period.	TRINITY	0%	TBD	30.11.2013	30.11.2013	
	f) Result Map shall be displayed as a 'Disaster search result' which is one member layer of the CMC Operation Maps. (see Fig.6-A)	TRINITY	0%	TBD	30.11.2013	30.11.2013	
	g) As for Print Result function, format of printed report shall be provided by USER.	TRINITY	0%	TBD	30.11.2013	30.11.2013	
4.4	**Add New Functions to MKFFIS**						
4.4.1	**Grid Information**						
	a) Show following information of a MGRS Grid clicked. • MGRS Grid code • Summary of resources in the grid (see Appendix B-1). Resources are in a database created by UNDP which is accessible from MKFFIS. • Summary of disaster events in the grid. Disaster events are in a database created by UNDP which is accessible from MKFFIS. • Summary of facility inventories in the grid. Inventories are in a database created by UNDP which is accessible from MKFFIS. • FWI at the center of the grid. FWI grid values are kept as GeoTIFF image. • ⬚ Vegetation dryness at the center of the grid. Vegetation dryness grid values are kept as GetTIFF image.	TRINITY	0%	TBD	30.12.2013	30.12.2013	
	Demographic information						
4.4.2	**a)** Show demographic information of an administrative area clicked (National, Municipalities, Settlements). When info button is clicked, show summary, and detail table representation to be shown below on the screen.	TRINITY	0%	TBD	30.11.2013	30.11.2013	

	b) Demographic information will be in a database to be created by UNDP which will become accessible from MKFFIS in mid July 2013.	TRINITY	0%	TBD	30.11.2013	30.11.2013
	c) Demographic information to be shown on the info button and detailed table will be decided by USER.	TRINITY	0%	TBD	30.11.2013	30.11.2013
	Add means to switch Between MKFFIS for internal purpose and MKFFIS for Public					
4.4.3	**a)** Currently, MKFFIS serves for internal purpose controlling available features by user account. But another instance of MKFFIS will be installed on the Internet Server to serve public users. MKFFIS for Public can be opened without login process, but much stronger restriction will be applied. Successful PROPOSER shall add means to switch from MKFFIS for internal purpose to MKFFIS for Public. Following procedure is an example of solution. • Define a special user GUEST. • Restriction to the public user will be applied by privilege settings of user GUEST. • Add necessary exceptions applicable to GUEST user. For example, user profile of GUEST user is not kept . • Prepare PUBLIC flag in a configuration file of MKFFIS GIS. • If the flag is OFF, MKFFIS starts normally from the login page. • VI. If the flag is ON, MKFFIS skips login page and starts from the main page, setting user name to GUEST automatically.	TRINITY	0%	TBD	30.11.2013	30.11.2013
	b) Link to MKFFIS for internal purpose shall be added to the MKFFIS for public.	TRINITY	0%	TBD	30.11.2013	30.11.2013
4.4.4	**Add function to fill section 5.1 in *P2* report taking meteorological data from AWS.**		100%	25.09.2013	09.10.2013	09.10.2013

	a) Add an AWS select box next to the 'Meteorological Station' text box. (See Fig..11) AWS Names in the select box shall be taken dynamically from the 'meteorologicalstations' table in the CUK database.	SIMT	100%	25.09.2013	09.10.2013	09.10.2013	
	b) Search the meteorological data of the selected AWS which is closest to the date/time specified in the '2.2 Detection' text box.	SIMT	100%	25.09.2013	09.10.2013	09.10.2013	
	c) If there is no data between 3 hours before and after the date/time specified by the '2.2 Detection' text box, show message 'No AWS data available' and do nothing to the textboxes, otherwise fill following textboxes in the section 5.1 of P2 report. • Meteorological Station: (name of meteorological station) • hour: (hour of the meteorological data measured) • Number of days from last raining: (to fill this box some calculation is necessary) • Maximum temperature: (fill maximum temperature of the specified day) • Relative humidity • Wind Speed • Direction (Wind direction)	SIMT	100%	25.09.2013	09.10.2013	09.10.2013	
	Changes requested from Operation deparment from CMC about forest fire report	SIMT	100%	03.10.2013	09.10.2013	09.10.2013	
4.5	**Add New Functions/Interface to GFIS**						
	Add a link to user manual						
4.5.1	**a)** Add a link to end user manual of GFIS GIS to the tool bar.	JICA					
	b) Add a link to end user manual of GFIS Planning to the top link.	JICA					
	c) Add a link to end user manual of GFIS Fire Report to the top link.	JICA					

	d) In English mode link to the user manual of English version, and In Macedonian mode link to the user manual of Macedonian version.	JICA					
4.5.2	**Limit available FMU by user privilege**						
	a) Add a function to the GFIS Admin page in order to specify FMUs under responsibility of each user.	TRINITY	0%	TBD	30.11.2013	30.11.2013	
	b) Limit FMUs to display and/or edit according to above privilege.	TRINITY	0%	TBD	30.11.2013	30.11.2013	
	c) Limit FMUs shown in the FMU Selector according to above privilege.	TRINITY	0%	TBD	30.11.2013	30.11.2013	
	d) Zoom in FMU under responsibility of the user when that user opens GFIS GIS.	TRINITY	0%	TBD	30.11.2013	30.11.2013	
4.5.3	**Allow access to past versions of forest plan.**						
	a) Currently, if a FMU polygon is edited and uploaded, old FMU polygons will be replaced by new FMU polygons. Therefore only the latest FMUs can be seen on GFIS GIS. Successful PROPOSER under the direction of PEMF shall add function to show FMUs in a past date specified by a calendar control. Following procedures are just an example of solution: • Add a calendar control to a suitable place on GFIS GIS. • Add attributes (effective from, expired on) to each FMU. • Preset some past date such as 1900.01.01 to 'effective from' and NULL to 'expired on'. • When a new FMU is uploaded, keep the old FMU and set its 'expired on' to the updated date. • Set the updated date to the new FMU's 'effective from' and set NULL to 'expired on'. • When a past date is specified, display FMUs according to their attribute 'effective from' and 'expired on'.	TRINITY	0%	TBD	30.11.2013	30.11.2013	
4.5.4	**Search FMU by year of expiry of special plan**		0%	01.12.2013	20.12.2013	20.12.2013	

	a) Each FMU has its planning effective for ten years. And the duration is kept in the forest planning database. Successful PROPOSER under the direction of PEMF shall add a function to search FMUs which special plans expire in the year specified.	SIMT	0%	01.12.2013	20.12.2013	20.12.2013	
4.5.5	**Change monthly input to daily for form 3, 3a and 5**		90%	15.10.2013	29.10.2013	29.10.2013	
	a) Currently, data entry to the form 3, 3a and 5 is carried out on a monthly basis. Successful PROPOSER under the direction of PEMF shall modify the code to cater to daily data entry. And add two options to the print function for these forms, one is daily summary, the other is monthly summary.	SIMT	90%	15.10.2013	29.10.2013	29.10.2013	
4.5.6	**Keep annual achievement for 10 years in Form 6**		0%	28.10.2013	06.11.2013	06.11.2013	
	a) Successful PROPOSER under the direction of PEMF shall modify code and design of Form 6 data entry sheet to keep annual achievement for 10 years for each sub compartment. Items to keep are as follows. • Area (ha) • Number of seedlings • Weight of seeds (kg)	SIMT	0%	28.10.2013	06.11.2013	06.11.2013	
4.5.7	**Keep annual achievement for 10 years in Form 8**		0%	01.11.2013	06.11.2013	06.11.2013	
	a) Successful PROPOSER under the direction of PEMF shall modify code and design of Form 8 data entry sheet to keep annual achievement for 10 years for each sub compartment. Items to keep are as follows. • Length of roads (km) • Cleared wood (m3)	SIMT	0%	01.11.2013	06.11.2013	06.11.2013	
4.5.8	**Fill area in Form 1 taken from polygon attribute**		0%	20.11.2013	01.12.2013	01.12.2013	
	a) Successful PROPOSER under the direction of PEMF shall modify code of Form 1 data entry sheet to fill area automatically taken from the attribute of polygon corresponding to selected sub compartment.	SIMT	0%	20.11.2013	01.12.2013	01.12.2013	

	Add National and Regional office level summaries to the reports in Reports/Rekapitulari menu.		100%	03.10.2013	20.10.2013	20.10.2013	
4.5.9	**a)** Currently, reports under the Reports/Rekapitulari menu are summary of selected FMU. Successful PROPOSER under the direction of PEMF shall add summary of National level and Regional Office level, and add links to corresponding summaries in the menu.	SIMT	100%	03.10.2013	20.10.2013	20.10.2013	
	b) FMUs shall be classified by regional office in order to create regional office summary.	SIMT	100%	03.10.2013	20.10.2013	20.10.2013	
6.	I**mprovement related to MKFFIS & GFIS modules**						
4.6.1	Modify PEMF Fire Report input module to report by fire.						
	a) Currently fire report is created in PEMF by each sub compartment even in case of one big fire over several compartments. On the other hand, in the CMC fire report (P2 report) is fire based, not sub compartment based. Therefore, a fire report divided into several reports by sub compartment must be merged at CMC to create P2 report for one fire. There are some complaints in PEMF for this process. • PEMF does not want redundant data entry. For example, some common fields such as start of fire and end of fire should be entered repeatedly for each related sub compartment. • PEMF has authority to identify a fire over several sub compartments, therefore merging reports by sub compartment into one fire report should be conducted by PEMF. • Fire report from PEMF does not have to be by sub compartment. Report by fire is acceptable.	SIMT	0%	06.11.2013	TBD	25.11.2013	

	b) Because P2 report module has a function to manage a report containing information of multiple sub compartments, applying the same approach to the PEMF fire report will be an elegant solution.	SIMT	0%	06.11.2013	TBD	25.11.2013	
	c) Successful PROPOSER under direction of USER shall conduct following modification. • Modify current PEMF fire report module on GFIS Fire Report so that it can report by fire by adding functionality to manage information from multiple sub compartments. • Remove MERGE PEMF REPORT function from P2 report module in MKFFIS Fire Report. • Add IMPORT PEMF REPORT function to MKFFIS Fire Report • Adjust P2 Report module on MKFFIS Fire Report to be able to show correctly the Fire report which was imported from PEMF REPORT • Rename P2 Report as CMC Forest Fire Report. • Add 'read-only' user privilege to GFIS Fire Report and MKFFIS Fire Report which allows MKFFIS user to browse PEMF fire report, and allows GFIS user to browse CMC Fire Report. • Printing format of PEMF Fire Report to obtain approval of SiFH shall not be changed.	SIMT	0%	06.11.2013	TBD	25.11.2013	
7.	**Performance Tuning**						
4.7.1	**Performance tuning of MKFFIS**		10%				

	a) Currently, there are following complaints about speed. • MKFFIS GIS takes very long time to show the login page, if it is accessed over a long distance. For example, accessing from Japan, it takes 90 seconds to open the login page and another 90 • Speed to show FMUs is slow, and from time to time it fails to show them.	TRINITY	30%	02.10.2013	25.10.2013	25.10.2013	
	b) MKFFIS GIS shall be optimized by execution speed.	TRINITY	30%	02.10.2013	25.10.2013	25.10.2013	
	c) Optimization is not limited to source code level. All the possible factors shall be taken into account. For example, server configuration, deployment of files, network structure, use of external servers (Google server for jQuery), indexing of tables in databases, etc.	TRINITY	10%	02.10.2013	25.10.2013	25.10.2013	
	d) Improvement of performance should be shown quantitatively.	TRINITY	15%	02.10.2013	25.10.2013	25.10.2013	
	Performance tuning of GFIS						
4.7.2	**a)** Currently, there are following complaints about speed which are similar to MKFFIS GIS. • GFIS GIS takes very long time to show the login page, if it is accessed over a long distance. • Speed to show FMUs is slow, and from time to time it fails to show them.	TRINITY	0%	25.10.2013	05.11.2013	05.11.2013	
	b) GFIS GIS shall be optimized by execution speed	TRINITY	0%	25.10.2013	05.11.2013	05.11.2013	
	c) Optimization is not limited to source code level. All the possible factors shall be taken into account. For example, server configuration, deployment of files, network structure, use of external servers (Google server for jQuery), indexing of tables in databases, etc.	TRINITY	0%	25.10.2013	05.11.2013	05.11.2013	

	d) Improvement of performance should be shown quantitatively.	TRINITY	0%	25.10.2013	05.11.2013	05.11.2013	
8.	**Installation/QA/Training/Documentation**						
4.8.1	MKFFIS and GIS Installation, Quality Assurance, Training, Documentation						
4.8.2	GFIS and GIS Installation, Quality Assurance, Training, Documentation						

4.2 Improve MKFFIS User Interface

4.2.1 Both tree views, FMU and regular have been completed and functional. Different Icon can be placed instead of the default directory icon.
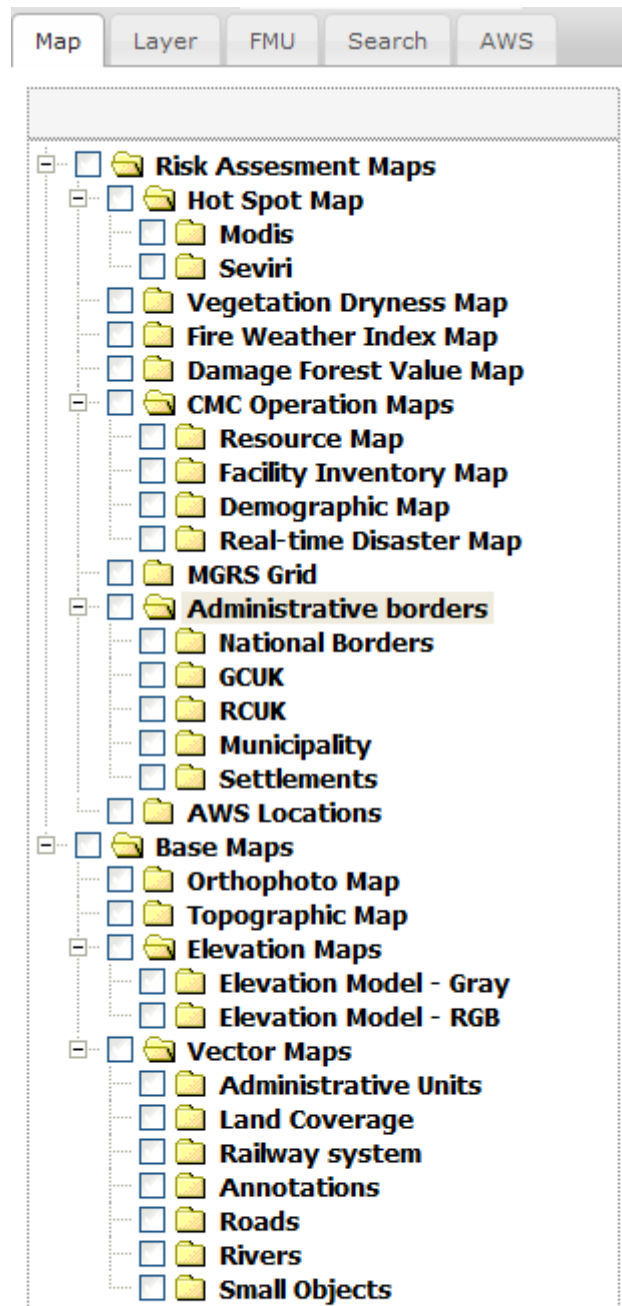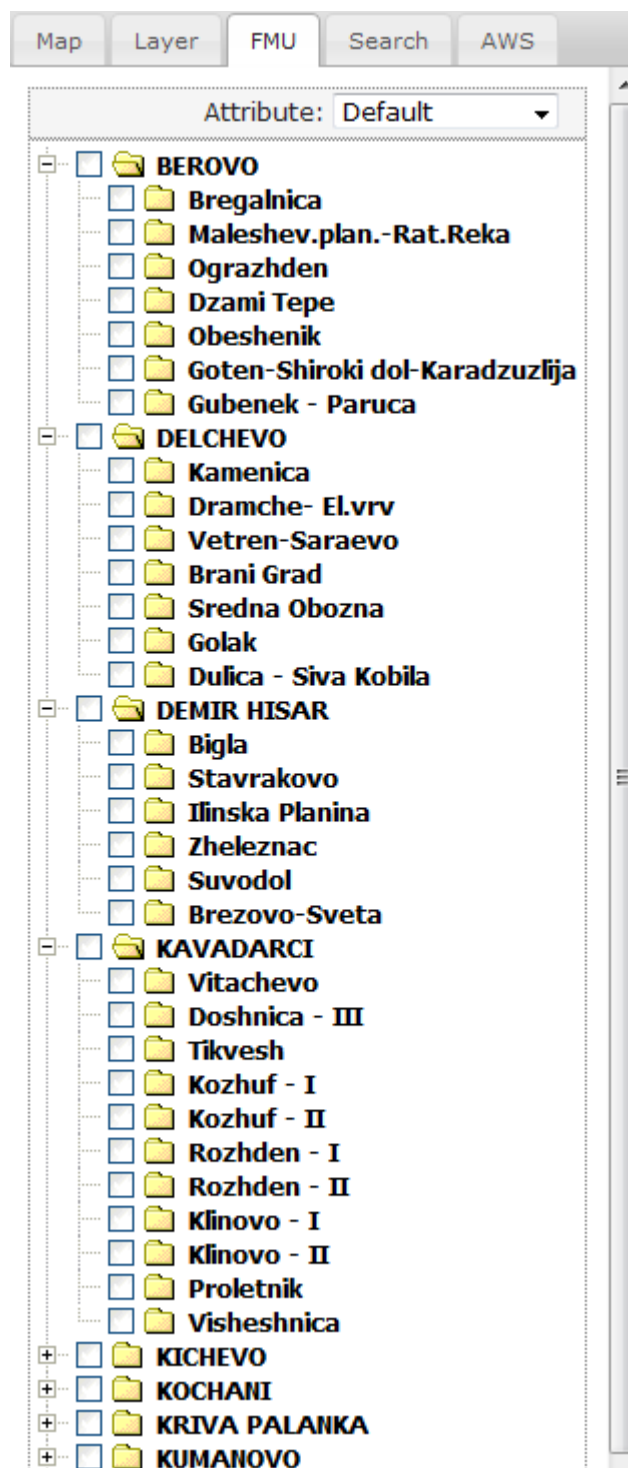
4.2.3 The calendar control function is under development. For the hotspot maps the plan is to publish all of the information in one shape file per hotspot map and the viewing will be filter based (from the attribute date in each of the layers). This functionality shall be completed by 26.10.2013.

4.2.6 The attribute selection has been set up in the correct position and is fully functional. A demonstration shall be done Monday.

4.3 Add New Layers / Improve Layers

4.3.1 Improve Vegetation map Layer by including National Parks TRINITY
Target: MKFFIS GIS and GFIS GIS
We are waiting for the shape files of the National Parks so that we can implement them in the database and the Geoserver.

4.3.5.4 Real-time disaster report from RCMC TRINITY & SIMT
Target: MKFFIS GIS
A draft version for the Disaster report event and reports has been created. The information in the database is currently only for the fire events. A closer look should be cast in Thursday's meeting for the appropriate format of entering the data and functionality.

The reporting phase is nearly completed. We have fully completed a report for a snowfall event to be shown on Monday.

4.3.4 The damage forest maps has been finished. The function utilizes the JSTS libraries. The user first needs to select FMU to view from the FMU tab. When the FMU have been selected, the user should check the checkbox for the Damage Forest Value Map. Upon checking the map, the script checks which FMU have been selected and sends an appropriate WFS request containing the sub-compartments of all the selected FMUs as one. Then the user is granted a tool for drawing the polygon on top of the WFS layer. The JSTS tool that checks for intersections and displays the intersected area in ha. The only thing left to do is to gather the rest of the information that is stored in the Form9 from the database.

4.4 Add New Functions to MKFFIS

4.4.4 Add function to fill section 5.1 in P2 report taking meteorological data from AWS. SIMT
Target: MKFFIS Fire Report
Waiting for test on side be CMC/JICA and approval.
Demo is on test side.

4.5 Add New Functions/Interface to GFIS

4.5.4 Search FMU by year of expiry of special plan TRINITY & SIMT
Target: GFIS GIS

4.5.5 Change monthly input to daily for form 3, 3a and 5 SIMT
Target: GFIS Planning
All three forms (3, 3a and 5) for logging are completed, for insert, update and delete, summary reports by all three forms are created and right page printing for all three forms are done. Only translating to English need to be done. Last version of the application is on test server.

4.5.6 Keep annual achievement for 10 years in Form 6 SIMT
Target: GFIS Planning

4.5.7 Keep annual achievement for 10 years in Form 8 SIMT
Target: GFIS Planning

4.5.8 Fill area in Form 1 taken from polygon attribute SIMT
Target: GFIS Planning

4.5.9 Add National and Regional office level summaries to the reports in Reports/Rekapitulari menu. SIMT
Target: GFIS Planning

Waiting for test on side be PEMF/CMC/JICA and approval.
Demo is on test side.

4.6 Improvement related to both MKFFIS and GFIS modules

4.6.1 Modify PEMF Fire Report input module to report by fire. SIMT

4.7.1 Trinity extensively works on finding ways of fixing the performance issues. Unnecessary scripts are being deleted, performance tuning on the loading of the layers is done, external loading of the scripts is done etc.

- SD 2 -

WEEKLY PROGRESS REPORT   No.5

For period from October 25th to October 31th, 2013

Author: EDUSOFT, SIMT, TRINITY

Creation Date: October 31th, 2013

Seq.No	Task Description	Assignee	Current % of progress	DATES			Tested Accepted by Purchaser User
				Planed Start	Planed End	Contracted/ Targeted	
4.2	**Improve MKFFIS User Interface**						
4.2.1	**Reform MKFFIS Left pane**						
	a) Remove Accordion menu, Navigation and Layers button from the left pane.	TRINITY	100%	02.10.2013	18.10.2013	10.10.2013	
	b) Add Tab control with five tabs.	TRINITY	100%	02.10.2013	18.10.2013	10.10.2013	
	c) Deploy Layers panel in the first tab named 'Layers'. This tab should be a default. (See Fig. 7)	TRINITY		02.10.2013	18.10.2013	10.10.2013	
	d) Deploy Map Selector in the second tab named 'Maps'. Show hierarchy of each map using a tree view control, except vegetation map. Show only the root node for vegetation map in the tree view. (See Fig.6) Because vegetation map has a lot of FMUs as its children, FMU selector should be accommodated in a separate tab (e). (See Fig. 8)	TRINITY	100%	02.10.2013	26.10.2013	10.10.2013	
	e) Deploy FMU selector in the third tab named 'FMU'. (See Fig. 8)	TRINITY	100%	02.10.2013	18.10.2013	10.10.2013	
	f) Deploy an accordion menu with two menu items in the fourth tab named 'Search'. Deploy Search Forest History panel in the first accordion menu item. (See Fig. 10)	TRINITY	40%	02.10.2013	01.12.2013	01.12.2013	
	g) Deploy AWS Overview panel in the fifth tab named 'AWS'. (See Fig. 9)	TRINITY	40%	02.10.2013	01.12.2013	01.12.2013	
	h) Tab names should be displayed in the language specified by the current language mode.	TRINITY	0%	02.10.2013	31.12.2013	31.12.2013	

	i) Layer settings in the Layers panel (Order of the layers, selected maps) and selected maps in the Map Selector and FMU selector shall be kept in a table with a relation to the user account, and when the user logs in again, the settings shall be restored.	TRINITY	0%	TBD	31.12.2013	31.12.2013	
4.2.2	**Add a link to user manual**		%				
	a) Add a link to end user manual of MKFFIS GIS to the tool bar.	JICA	0%	TBD	20.11.2013	20.11.2013	
	b) Add a link to end user manual of MKFFIS Fire Report to the top link.	JICA	0%	TBD	20.11.2013	20.11.2013	
	c) In English mode link to the user manual of English version, and In Macedonian mode link to the user manual of Macedonian version.	JICA	0%	TBD	20.11.2013	20.11.2013	
4.2.3	**Change background image seasonally**		%				
	a) Change background image on the login page seasonally. Image for each season will be provided by USER.		80%	TBD	20.11.2013	20.11.2013	
4.2.4	**Add a common calendar control**						
	a) Currently, vegetation dryness map (VDM) and FWI map have their own calendar control independently. And each hotspot (Seviri, Modis and Modis raw) has selections of 1 day ago, 2 days ago and 3 days ago.	TRINITY	100%	.04.10.2013	26.10.2013	15.10.2013	
	b) Remove the calendar control for VDM and FWI map.	TRINITY	100%	04.10.2013	26.10.2013	15.10.2013	
	c) Remove the hot spot selections: 1 day ago, 2 days ago and 3 days ago.	TRINITY	60%	04.10.2013	26.10.2013	15.10.2013	
	d) Rename hot spot selections: 'Seviri (Today)' as 'Seviri', 'Modis (Today)' as 'Modis'.	TRINITY	60%	04.10.2013	26.10.2013	15.10.2013	
	e) Add a calendar control with label 'Date' on the space where currently 'Navigation' is there. (See Fig. 7)	TRINITY	100%	TBD	26.10.2013	20.11.2013	
	f) Add a check box with label 'Now' next to the above calendar control. 'Now' shall be checked by default. *Labels should be in the language specified by current language mode.	TRINITY	100%	TBD	26.10.2013	20.11.2013	

	g) Modify code as follows: • When a past day is specified by the calendar control, clear 'Now' check box, and show VDM, FWI map hotspots and real-time disaster report (see 4.3.5.4) of the day specified. • When 'Now' check box is checked, show vegetation map, FWI map, hotspots and real-time disaster report of the current day, and keep updating these four real-time maps.	TRINITY	100%	04.10.2013	26.10.2013		15.10.20 13
4.2.5	**Display FWI Map of the previous day until today's FWI Map becomes available**						
	a) Currently, FWI Map is not shown until a day is specified by its calendar control.	TRINITY	100%	TBD	26.10.2013	20.11.2013	
	b) Modify code as follows: When 'Now' is checked (it is checked by default) FWI Map of now should be displayed. But FWI Map is created almost every day at 2pm. Therefore, it shall be displayed by the following rule. •If FWI Map of the current day exists now, display it. •Otherwise display FWI Map of one day before, if such exists. •Otherwise don't display FWI Map.	TRINITY	100%	TBD	26.10.2013	20.11.2013	
4.2.6	**Relocate vegetation map's attribute selector from Layers panel to the top of FMU selector**						
	a) Currently, attribute selectors of vegetation map are located in the Layers panel for each FMU (See Appendix A.4)	TRINITY	100%	TBD	20.11.2013	20.11.2013	
	b) Remove all the attribute selectors from the Layers panel.	TRINITY	100%	TBD	20.11.2013	20.11.2013	
	c) Add one attribute selector to the top line of FMU selector accommodated in the FMU Tab. (See Fig. 8)	TRINITY	100%	TBD	20.11.2013	20.11.2013	
	d) Modify code to apply the selected attribute to all the FMUs.	TRINITY	100%	TBD	20.11.2013	20.11.2013	

4.3	**Add New Layers / Improve Layers**						
	Improve Vegetation map Layer by including National Parks						
4.3.1	**a)** Shape files for three national parks will be provided from PURCHASER/USER. (*Related data set cleaning in progress by SIMT)	TRINITY	0%	TBD	20.11.2013	20.11.2013	
	b) Classification of species of National parks is not compatible to PEMF classification. So, Classification shall be converted to be compatible to PEMF's according to direction of PURCHASER/USER. (*Related classification of species in progress by SIMT)	TRINITY	0%	TBD	20.11.2013	20.11.2013	
	c) Add each National park FMU polygon as a member of PEMF FMU group.	TRINITY	0%	TBD	20.11.2013	20.11.2013	
4.3.2	**Improve Vegetation map Layer by including Protected area Zone 1**						
	a) Shape files for Protected area Zone 1 will be provided from PURCHASER/USER. They don't contain attributes.	TRINITY	0%	TBD	30.11.2013	30.11.2013	
	b) Add each Protected area Zone 1 polygon as a member of PEMF FMU group.	TRINITY	0%	TBD	30.11.2013	30.11.2013	
4.3.3	**Add a New Layer for MGRS Grid**						
	a) Add MGRS grid.	TRINITY	0%	TBD	30.11.2013	30.11.2013	
	b) Idea of implementation of MGRS grid can be obtained from http://dhost.info/usngweb/ (* definition of MGRS grid is different from definition of U.S. National Grid)	TRINITY	0%	TBD	30.11.2013	30.11.2013	
	c) Definition of MGRS Grid can be obtained from http://earth-info.nga.mil/GandG/coordsys/grids/mgrs.doc	TRINITY	0%	TBD	30.11.2013	30.11.2013	

	d) Suitable grids according to current zoom-in factor shall be selectable from Zone, 100km, 10km, 1km, 100m and 10m.	TRINITY	0%	TBD	30.11.2013	30.11.2013	
	Add a new Layer "Damage Forest Value Map"						
	a) Add a user privilege to enable/disable to access this map. When this layer is selected following functions shall be enabled.	TRINITY	0%	TBD	30.11.2013	30.11.2013	
	b) Allow users to draw a polygon	TRINITY	100%	TBD	30.11.2013	30.11.2013	
	c) Find intersections of the drawn polygon and subcompartments	TRINITY	100%	TBD	30.11.2013	30.11.2013	
4.3.4	**d)** As table form, the following data shall be shown for the intersected area: • CompartmentNo./SubCompartment No. • Intersected Area (ha) • Total Area of Subcompartment (ha) This value should be taken from Form9 of Inventory for corresponding subcompartment • % of intersected area over total area of subcompartment This value should be calculated by Intersected Area / total area of subcompartment x 100 • Value for the intersected area This value should be calculated as Value of Forest x % of intersected area where Value of Forest area shall be taken from corresponding field in Form 9 of Inventory • Total Value for the intersected areas	TRINITY	80%	TBD	30.11.2013	30.11.2013	
	e) Result intersection polygons shall be displayed in this layer with a color classification according to the total value for the intersected areas. User shall provide classification of colors by value.	TRINITY	0%	TBD	30.11.2013	30.11.2013	
4.3.5	**Add new layer group – CMC Operation Maps**						

4.3.5	**a)** Add a user privilege to enable/disable to access this Layer group.	TRINITY	0%	TBD	30.11.2013	30.11.2013
	b) When this layer group is selected, user is allowed to draw a polygon which is used for inner polygon searches enabled by corresponding inner polygon search switches. (see Fig.6-A)	TRINITY	0%	TBD	30.11.2013	30.11.2013
	c) State of inner polygon search switches shall be kept in a table with a relation to the user account, and when the user logs in again, the state shall be restored.	TRINITY	0%	TBD	30.11.2013	30.11.2013
	d) The node of "CMC Operation Maps" shall be expanded by default.	TRINITY	0%	TBD	30.11.2013	30.11.2013
4.3.5.1	**Add a "Resource Map" Layer**					
	a) Create and display resource icons corresponding to resource types at the coordinates specified in resource records from UNDP Database. (See Appendix B-1)	TRINITY	0%	TBD	30.11.2013	30.11.2013
	b) This is not a permanent map. Successful PROPOSER shall write code to create and replace the map once a month.	TRINITY	0%	TBD	30.11.2013	30.11.2013
	c) Add function for optional inner polygon search. Breakdown of resources in the drawn polygon shall be displayed as a table in the search result pane.	TRINITY	0%	TBD	30.11.2013	30.11.2013
4.3.5.2	**Add a "Facility inventory Map" Layer**					
	a) Create and display facility inventory icons corresponding to facility types at the coordinates specified in facility inventory records from UNDP Database. (See Appendix B-1)	TRINITY	0%	TBD	30.11.2013	30.11.2013
	b) This is not a permanent map. Successful PROPOSER shall write code to create and replace the map once a month.	TRINITY	0%	TBD	30.11.2013	30.11.2013

	c) Add function for optional inner polygon search. Breakdown of facility inventory in the drawn polygon shall be displayed as a table in the search result pane.	TRINITY	0%	TBD	30.11.2013	30.11.2013	
	Add a "Demographic Map" Layer						
	a) Show a thematic map showing total population by color classification using border of settlements.	TRINITY	0%	TBD	30.11.2013	30.11.2013	
	b) This is not a permanent map. Successful PROPOSER shall write code to create and replace the map once a month.	TRINITY	0%	TBD	30.11.2013	30.11.2013	
4.3.5.3	**c)** Demographic information will be in a database to be created by UNDP which will become accessible from MKFFIS in mid July 2013. (see Appendix B-2)	TRINITY	0%	TBD	30.11.2013	30.11.2013	
	d) Add function for optional inner polygon search. Breakdown of total population of each settlement which is intersected by the drawn polygon shall be displayed in the search result pane.	TRINITY	0%	TBD	30.11.2013	30.11.2013	
	Real-time disaster report from RCMC						
	a) Add a user privilege to enable/disable this function	TRINITY	60%	05.10.2013	01.11.2013	01.11.2013	
4.3.5.4	**b)** Users having this privilege are able to send/edit/delete disaster report. Report consists of followings. • Geographic information (polygon, line, point, icon) drawn/dropped on the MKFFIS Map Pane • Text information (Details shall be decided by USER)	TRINITY	60%	05.10.2013	01.11.2013	01.11.2013	
	c) Disaster report sent shall be stored in Disaster Report Database. (Successful PROPOSER shall prepare this database).	TRINITY	60%	05.10.2013	01.11.2013	01.11.2013	
	d) The report sent, edited, deleted shall be reflected in real time to all the MKFFIS users who are online.	TRINITY	60%	05.10.2013	01.11.2013	01.11.2013	

	e) Geographic information sent shall be displayed as a Real-time disaster Map which is one member layer of the CMC Operation Maps. (see Fig.6-A)	TRINITY	60%	05.10.2013	01.11.2013	01.11.2013	
	f) Alarm message shall be displayed upon arrival of real-time disaster report. (In a message box for example)	TRINITY	60%	05.10.2013	01.11.2013	01.11.2013	
	g) Salvage as much data as possible from ESRI Application created on ArcSDE (see APPENDIX C). Source code is not available for ESRI Application, but user account of ArcSDE database (MSSQL) will be provided.	TRINITY	0%	TBD	01.11.2013	01.11.2013	
	h) If type of disaster is forest fire; create a new CMC Forest Fire Report. (Refer to 4.6.1)	TRINITY	0%	TBD	01.11.2013	01.11.2013	
4.3.5.5	**Search disaster reports**						
	a) Add a panel for this search in the second menu item of the accordion menu in Search tab. (see Fig. 10)	TRINITY	0%	TBD	30.11.2013	30.11.2013	
	b) Only the filter by CMC classification is required. PEMF classification is not necessary.	TRINITY	0%	TBD	30.11.2013	30.11.2013	
	c) Search disaster report panel has following controls: • From Date • To Date • GCUK unit selector • RCUK unit selector • Municipality and Settlement selector • Type of events • Search Report button • Clear Result button • Print Result button	TRINITY	0%	TBD	30.11.2013	30.11.2013	
	d) Search result shall be shown in the search result pane.	TRINITY	0%	TBD	30.11.2013	30.11.2013	

	e) Color of GCUK or RCUK polygons shall be classified by the number of disasters in the polygons in the specified period.	TRINITY	0%	TBD	30.11.2013	30.11.2013	
	f) Result Map shall be displayed as a 'Disaster search result' which is one member layer of the CMC Operation Maps. (see Fig.6-A)	TRINITY	0%	TBD	30.11.2013	30.11.2013	
	g) As for Print Result function, format of printed report shall be provided by USER.	TRINITY	0%	TBD	30.11.2013	30.11.2013	
4.4	**Add New Functions to MKFFIS**						
4.4.1	**Grid Information**						
	a) Show following information of a MGRS Grid clicked. • MGRS Grid code • Summary of resources in the grid (see Appendix B-1). Resources are in a database created by UNDP which is accessible from MKFFIS. • Summary of disaster events in the grid. Disaster events are in a database created by UNDP which is accessible from MKFFIS. • Summary of facility inventories in the grid. Inventories are in a database created by UNDP which is accessible from MKFFIS. • FWI at the center of the grid. FWI grid values are kept as GeoTIFF image. • Vegetation dryness at the center of the grid. Vegetation dryness grid values are kept as GetTIFF image.	TRINITY	0%	TBD	30.12.2013	30.12.2013	
	Demographic information						
4.4.2	**a)** Show demographic information of an administrative area clicked (National, Municipalities, Settlements). When info button is clicked, show summary, and detail table representation to be shown below on the screen.	TRINITY	0%	TBD	30.11.2013	30.11.2013	

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	b) Demographic information will be in a database to be created by UNDP which will become accessible from MKFFIS in mid July 2013.	TRINITY	0%	TBD	30.11.2013	30.11.2013	
	c) Demographic information to be shown on the info button and detailed table will be decided by USER.	TRINITY	0%	TBD	30.11.2013	30.11.2013	
	Add means to switch Between MKFFIS for internal purpose and MKFFIS for Public						
4.4.3	**a)** Currently, MKFFIS serves for internal purpose controlling available features by user account. But another instance of MKFFIS will be installed on the Internet Server to serve public users. MKFFIS for Public can be opened without login process, but much stronger restriction will be applied. Successful PROPOSER shall add means to switch from MKFFIS for internal purpose to MKFFIS for Public. Following procedure is an example of solution. • Define a special user GUEST. • Restriction to the public user will be applied by privilege settings of user GUEST. • Add necessary exceptions applicable to GUEST user. For example, user profile of GUEST user is not kept . • Prepare PUBLIC flag in a configuration file of MKFFIS GIS. • If the flag is OFF, MKFFIS starts normally from the login page. • VI. If the flag is ON, MKFFIS skips login page and starts from the main page, setting user name to GUEST automatically.	TRINITY	0%	TBD	30.11.2013	30.11.2013	
	b) Link to MKFFIS for internal purpose shall be added to the MKFFIS for public.	TRINITY	0%	TBD	30.11.2013	30.11.2013	
4.4.4	**Add function to fill section 5.1 in *P2* report taking meteorological data from AWS.**		100%	25.09.2013	09.10.2013	09.10.2013	

	a) Add an AWS select box next to the 'Meteorological Station' text box. (See Fig..11) AWS Names in the select box shall be taken dynamically from the 'meteorologicalstations' table in the CUK database.	SIMT	100%	25.09.2013	09.10.2013	09.10.2013	
	b) Search the meteorological data of the selected AWS which is closest to the date/time specified in the '2.2 Detection' text box.	SIMT	100%	25.09.2013	09.10.2013	09.10.2013	
	c) If there is no data between 3 hours before and after the date/time specified by the '2.2 Detection' text box, show message 'No AWS data available' and do nothing to the textboxes, otherwise fill following textboxes in the section 5.1 of P2 report. • Meteorological Station: (name of meteorological station) • hour: (hour of the meteorological data measured) • Number of days from last raining: (to fill this box some calculation is necessary) • Maximum temperature: (fill maximum temperature of the specified day) • Relative humidity • Wind Speed • Direction (Wind direction)	SIMT	100%	25.09.2013	09.10.2013	09.10.2013	
	Changes requested from Operation deparment from CMC about forest fire report	SIMT	100%	03.10.2013	09.10.2013	09.10.2013	
4.5	**Add New Functions/Interface to GFIS**						
	Add a link to user manual						
4.5.1	**a)** Add a link to end user manual of GFIS GIS to the tool bar.	JICA					
	b) Add a link to end user manual of GFIS Planning to the top link.	JICA					
	c) Add a link to end user manual of GFIS Fire Report to the top link.	JICA					

	d) In English mode link to the user manual of English version, and In Macedonian mode link to the user manual of Macedonian version.	JICA					
	Limit available FMU by user privilege						
	a) Add a function to the GFIS Admin page in order to specify FMUs under responsibility of each user.	TRINITY	0%	TBD	30.11.2013	30.11.2013	
4.5.2	**b)** Limit FMUs to display and/or edit according to above privilege.	TRINITY	0%	TBD	30.11.2013	30.11.2013	
	c) Limit FMUs shown in the FMU Selector according to above privilege.	TRINITY	0%	TBD	30.11.2013	30.11.2013	
	d) Zoom in FMU under responsibility of the user when that user opens GFIS GIS.	TRINITY	0%	TBD	30.11.2013	30.11.2013	
	Allow access to past versions of forest plan.						
4.5.3	**a)** Currently, if a FMU polygon is edited and uploaded, old FMU polygons will be replaced by new FMU polygons. Therefore only the latest FMUs can be seen on GFIS GIS. Successful PROPOSER under the direction of PEMF shall add function to show FMUs in a past date specified by a calendar control. Following procedures are just an example of solution: • Add a calendar control to a suitable place on GFIS GIS. • Add attributes (effective from, expired on) to each FMU. • Preset some past date such as 1900.01.01 to 'effective from' and NULL to 'expired on'. • When a new FMU is uploaded, keep the old FMU and set its 'expired on' to the updated date. • Set the updated date to the new FMU's 'effective from' and set NULL to 'expired on'. • When a past date is specified, display FMUs according to their attribute 'effective from' and 'expired on'.	TRINITY	0%	TBD	30.11.2013	30.11.2013	
4.5.4	**Search FMU by year of expiry of special plan**		0%	01.12.2013	20.12.2013	20.12.2013	

	a) Each FMU has its planning effective for ten years. And the duration is kept in the forest planning database. Successful PROPOSER under the direction of PEMF shall add a function to search FMUs which special plans expire in the year specified.	SIMT	0%	01.12.2013	20.12.2013	20.12.2013	
	Change monthly input to daily for form 3, 3a and 5		100%	15.10.2013	29.10.2013	29.10.2013	
4.5.5	**a)** Currently, data entry to the form 3, 3a and 5 is carried out on a monthly basis. Successful PROPOSER under the direction of PEMF shall modify the code to cater to daily data entry. And add two options to the print function for these forms, one is daily summary, the other is monthly summary.	SIMT	100%	15.10.2013	29.10.2013	29.10.2013	
	Keep annual achievement for 10 years in Form 6		30%	28.10.2013	06.11.2013	06.11.2013	
4.5.6	**a)** Successful PROPOSER under the direction of PEMF shall modify code and design of Form 6 data entry sheet to keep annual achievement for 10 years for each sub compartment. Items to keep are as follows. • Area (ha) • Number of seedlings • Weight of seeds (kg)	SIMT	30%	28.10.2013	06.11.2013	06.11.2013	
	Keep annual achievement for 10 years in Form *8*		60%	01.11.2013	06.11.2013	06.11.2013	
4.5.7	**a)** Successful PROPOSER under the direction of PEMF shall modify code and design of Form 8 data entry sheet to keep annual achievement for 10 years for each sub compartment. Items to keep are as follows. • Length of roads (km) • Cleared wood (m3)	SIMT	60%	01.11.2013	06.11.2013	06.11.2013	
	Fill area in Form 1 taken from polygon attribute		0%	20.11.2013	01.12.2013	01.12.2013	
4.5.8	**a)** Successful PROPOSER under the direction of PEMF shall modify code of Form 1 data entry sheet to fill area automatically taken from the attribute of polygon corresponding to selected sub compartment.	SIMT	0%	20.11.2013	01.12.2013	01.12.2013	

	Add National and Regional office level summaries to the reports in Reports/Rekapitulari menu.		100%	03.10.2013	20.10.2013	20.10.2013	
4.5.9	**a)** Currently, reports under the Reports/Rekapitulari menu are summary of selected FMU. Successful PROPOSER under the direction of PEMF shall add summary of National level and Regional Office level, and add links to corresponding summaries in the menu.	SIMT	100%	03.10.2013	20.10.2013	20.10.2013	
	b) FMUs shall be classified by regional office in order to create regional office summary.	SIMT	100%	03.10.2013	20.10.2013	20.10.2013	
6.	I**mprovement related to MKFFIS & GFIS modules**						
4.6.1	Modify PEMF Fire Report input module to report by fire.						
	a) Currently fire report is created in PEMF by each sub compartment even in case of one big fire over several compartments. On the other hand, in the CMC fire report (P2 report) is fire based, not sub compartment based. Therefore, a fire report divided into several reports by sub compartment must be merged at CMC to create P2 report for one fire. There are some complaints in PEMF for this process. • PEMF does not want redundant data entry. For example, some common fields such as start of fire and end of fire should be entered repeatedly for each related sub compartment. • PEMF has authority to identify a fire over several sub compartments, therefore merging reports by sub compartment into one fire report should be conducted by PEMF. • Fire report from PEMF does not have to be by sub compartment. Report by fire is acceptable.	SIMT	0%	06.11.2013	TBD	25.11.2013	

	b) Because P2 report module has a function to manage a report containing information of multiple sub compartments, applying the same approach to the PEMF fire report will be an elegant solution.	SIMT	0%	06.11.2013	TBD	25.11.2013	
	c) Successful PROPOSER under direction of USER shall conduct following modification. • Modify current PEMF fire report module on GFIS Fire Report so that it can report by fire by adding functionality to manage information from multiple sub compartments. • Remove MERGE PEMF REPORT function from P2 report module in MKFFIS Fire Report. • Add IMPORT PEMF REPORT function to MKFFIS Fire Report • Adjust P2 Report module on MKFFIS Fire Report to be able to show correctly the Fire report which was imported from PEMF REPORT • Rename P2 Report as CMC Forest Fire Report. • Add 'read-only' user privilege to GFIS Fire Report and MKFFIS Fire Report which allows MKFFIS user to browse PEMF fire report, and allows GFIS user to browse CMC Fire Report. • Printing format of PEMF Fire Report to obtain approval of SiFH shall not be changed.	SIMT	0%	06.11.2013	TBD	25.11.2013	
7.	**Performance Tuning**						
4.7.1	**Performance tuning of MKFFIS**		10%				

	a) Currently, there are following complaints about speed. • MKFFIS GIS takes very long time to show the login page, if it is accessed over a long distance. For example, accessing from Japan, it takes 90 seconds to open the login page and another 90 • Speed to show FMUs is slow, and from time to time it fails to show them.	TRINITY	30%	02.10.2013	25.10.2013	25.10.2013	
	b) MKFFIS GIS shall be optimized by execution speed.	TRINITY	30%	02.10.2013	25.10.2013	25.10.2013	
	c) Optimization is not limited to source code level. All the possible factors shall be taken into account. For example, server configuration, deployment of files, network structure, use of external servers (Google server for jQuery), indexing of tables in databases, etc.	TRINITY	10%	02.10.2013	25.10.2013	25.10.2013	
	d) Improvement of performance should be shown quantitatively.	TRINITY	15%	02.10.2013	25.10.2013	25.10.2013	
4.7.2	**Performance tuning of GFIS**						
	a) Currently, there are following complaints about speed which are similar to MKFFIS GIS. • GFIS GIS takes very long time to show the login page, if it is accessed over a long distance. • Speed to show FMUs is slow, and from time to time it fails to show them.	TRINITY	0%	25.10.2013	05.11.2013	05.11.2013	
	b) GFIS GIS shall be optimized by execution speed	TRINITY	0%	25.10.2013	05.11.2013	05.11.2013	
	c) Optimization is not limited to source code level. All the possible factors shall be taken into account. For example, server configuration, deployment of files, network structure, use of external servers (Google server for jQuery), indexing of tables in databases, etc.	TRINITY	0%	25.10.2013	05.11.2013	05.11.2013	

	d) Improvement of performance should be shown quantitatively.	TRINITY	0%	25.10.2013	05.11.2013	05.11.2013	
8.	**Installation/QA/Training/Documentation**						
4.8.1	MKFFIS and GIS Installation, Quality Assurance, Training, Documentation						
4.8.2	GFIS and GIS Installation, Quality Assurance, Training, Documentation						

4.2 Improve MKFFIS User Interface

4.2.1 (e) We have started on improving the fire history search engine. Now every user had its own database table for the fire search results which is not optimum performance vise. The goal is to have one shape file, one database table, containing the joined fmu border polygons and the search is done filter based. We are working on ways to color the polygons programicaly and not with a style directly from the geoserver.

4.2.3 The calendar control is operational and functional. A demonstration shall be done on Monday.

4.3 Add New Layers / Improve Layers

4.3.1 Improve Vegetation map Layer by including National Parks TRINITY
Target: MKFFIS GIS and GFIS GIS
We are waiting for the shape files of the National Parks so that we can implement them in the database and the Geoserver.

4.3.5 We have a proposal on how the inner polygon search should be done for the three maps. Mr. Lazar sent us the development version of the database in MSSQL. We had trouble connecting the database with our Codeigniter environment but we finally managed to succeed by modifying the database driver itself. This means that the data can be used directly from the MSSQL database and no replication will be done to postgresql. A discussion for this proposal shall be conducted on Monday.

4.3.5.4 Real-time disaster report from RCMC TRINITY & SIMT
Target: MKFFIS GIS

. The drawing of a polygon is implemented and joined with the events. Now only the functionality for drawing and modifying a polygon has been created. A demonstration shall be conducted in Monday. Other features can be drawn, lines, points, drag and drop icon but it should be discussed on the meetings.

4.4 Add New Functions to MKFFIS

4.4.4 Add function to fill section 5.1 in P2 report taking meteorological data from AWS. SIMT
Target: MKFFIS Fire Report
Waiting for test on side be CMC/JICA and approval.
Demo is on test side.

4.5 Add New Functions/Interface to GFIS

4.5.4 Search FMU by year of expiry of special plan TRINITY & SIMT
Target: GFIS GIS

4.5.5 Change monthly input to daily for form 3, 3a and 5 SIMT
Target: GFIS Planning
Translating to English is done and internal testing is done.
Last version of the application is on test server.
Waiting for test on side be PEMF/CMC/JICA and approval.

4.5.6 Keep annual achievement for 10 years in Form 6 SIMT
Input form with initial view and insert is done for Macedonian version.
Demo is on test side.

Target: GFIS Planning

4.5.7 Keep annual achievement for 10 years in Form 8 SIMT
Input form with initial view, insert, update and delete function is done for Macedonian version. Left side printing for Macedonian is done. Right side printing design for Macedonian version is done.
Demo is on test side.
Target: GFIS Planning

4.5.8 Fill area in Form 1 taken from polygon attribute SIMT
Target: GFIS Planning

4.5.9 Add National and Regional office level summaries to the reports in Reports/Rekapitulari menu. SIMT
Target: GFIS Planning
Waiting for test on side be PEMF/CMC/JICA and approval.
Demo is on test side.

4.6 Improvement related to both MKFFIS and GFIS modules

4.6.1 Modify PEMF Fire Report input module to report by fire. SIMT

4.7.1 Trinity extensively works on finding ways of fixing the performance issues. Unnecessary scripts are being deleted, performance tuning on the loading of the layers is done, external loading of the scripts is done etc.

- SD 2 -

WEEKLY PROGRESS REPORT   No.6

For period from November 1st to November 7th, 2013

Author: EDUSOFT, SIMT, TRINITY

Creation Date: November 8th, 2013

WEEKLY PROGRESS REPORT for the period from November 1st to November 7th 2013

Seq. No.	Task Description	Assignee	Current % of progress	DATES			Tested Accepted by Purchaser User
				Planed Start	Planed End	Contracted/ Targeted	
4.2	**Improve MKFFIS User Interface**						
	Reform MKFFIS Left pane						
4.2.1	**a)** Remove Accordion menu, Navigation and Layers button from the left pane.	TRINITY	100%	02.10.2013	18.10.2013	10.10.2013	
	b) Add Tab control with five tabs.	TRINITY	100%	02.10.2013	18.10.2013	10.10.2013	
	c) Deploy Layers panel in the first tab named 'Layers'. This tab should be a default. (See Fig. 7)	TRINITY		02.10.2013	18.10.2013	10.10.2013	
	d) Deploy Map Selector in the second tab named 'Maps'. Show hierarchy of each map using a tree view control, except vegetation map. Show only the root node for vegetation map in the tree view. (See Fig.6) Because vegetation map has a lot of FMUs as its children, FMU selector should be accommodated in a separate tab (e). (See Fig. 8)	TRINITY	100%	02.10.2013	26.10.2013	10.10.2013	
	e) Deploy FMU selector in the third tab named 'FMU'. (See Fig. 8)	TRINITY	100%	02.10.2013	18.10.2013	10.10.2013	
	f) Deploy an accordion menu with two menu items in the fourth tab named 'Search'. Deploy Search Forest History panel in the first accordion menu item. (See Fig. 10)	TRINITY	40%	02.10.2013	01.12.2013	01.12.2013	
	g) Deploy AWS Overview panel in the fifth tab named 'AWS'. (See Fig. 9)	TRINITY	40%	02.10.2013	01.12.2013	01.12.2013	
	h) Tab names should be displayed in the language specified by the current language mode.	TRINITY	0%	02.10.2013	31.12.2013	31.12.2013	

	i) Layer settings in the Layers panel (Order of the layers, selected maps) and selected maps in the Map Selector and FMU selector shall be kept in a table with a relation to the user account, and when the user logs in again, the settings shall be restored.	TRINITY	0%	TBD	31.12.2013	31.12.2013	
	Add a link to user manual		%				
	a) Add a link to end user manual of MKFFIS GIS to the tool bar.	JICA	0%	TBD	20.11.2013	20.11.2013	
4.2.2	**b)** Add a link to end user manual of MKFFIS Fire Report to the top link.	JICA	0%	TBD	20.11.2013	20.11.2013	
	c) In English mode link to the user manual of English version, and In Macedonian mode link to the user manual of Macedonian version.	JICA	0%	TBD	20.11.2013	20.11.2013	
	Change background image seasonally		%				
4.2.3	**a)** Change background image on the login page seasonally. Image for each season will be provided by USER.		80%	TBD	20.11.2013	20.11.2013	
	Add a common calendar control						
	a) Currently, vegetation dryness map (VDM) and FWI map have their own calendar control independently. And each hotspot (Seviri, Modis and Modis raw) has selections of 1 day ago, 2 days ago and 3 days ago.	TRINITY	100%	.04.10.2013	26.10.2013	15.10.2013	
	b) Remove the calendar control for VDM and FWI map.	TRINITY	100%	04.10.2013	26.10.2013	15.10.2013	
	c) Remove the hot spot selections: 1 day ago, 2 days ago and 3 days ago.	TRINITY	60%	04.10.2013	26.10.2013	15.10.2013	
4.2.4	**d)** Rename hot spot selections: 'Seviri (Today)' as 'Seviri', 'Modis (Today)' as 'Modis'.	TRINITY	60%	04.10.2013	26.10.2013	15.10.2013	
	e) Add a calendar control with label 'Date' on the space where currently 'Navigation' is there. (See Fig. 7)	TRINITY	100%	TBD	26.10.2013	20.11.2013	
	f) Add a check box with label 'Now' next to the above calendar control. 'Now' shall be checked by default. *Labels should be in the language specified by current language mode.	TRINITY	100%	TBD	26.10.2013	20.11.2013	

	g) Modify code as follows: • When a past day is specified by the calendar control, clear 'Now' check box, and show VDM, FWI map hotspots and real-time disaster report (see 4.3.5.4) of the day specified. • When 'Now' check box is checked, show vegetation map, FWI map, hotspots and real-time disaster report of the current day, and keep updating these four real-time maps.	TRINITY	100%	04.10.2013	26.10.2013			15.10.20 13
4.2.5	**Display FWI Map of the previous day until today's FWI Map becomes available**							
	a) Currently, FWI Map is not shown until a day is specified by its calendar control.	TRINITY	100%	TBD	26.10.2013	20.11.2013		
	b) Modify code as follows: When 'Now' is checked (it is checked by default) FWI Map of now should be displayed. But FWI Map is created almost every day at 2pm. Therefore, it shall be displayed by the following rule. •If FWI Map of the current day exists now, display it. •Otherwise display FWI Map of one day before, if such exists. •Otherwise don't display FWI Map.	TRINITY	100%	TBD	26.10.2013	20.11.2013		
4.2.6	**Relocate vegetation map's attribute selector from Layers panel to the top of FMU selector**							
	a) Currently, attribute selectors of vegetation map are located in the Layers panel for each FMU (See Appendix A.4)	TRINITY	100%	TBD	20.11.2013	20.11.2013		
	b) Remove all the attribute selectors from the Layers panel.	TRINITY	100%	TBD	20.11.2013	20.11.2013		
	c) Add one attribute selector to the top line of FMU selector accommodated in the FMU Tab. (See Fig. 8)	TRINITY	100%	TBD	20.11.2013	20.11.2013		
	d) Modify code to apply the selected attribute to all the FMUs.	TRINITY	100%	TBD	20.11.2013	20.11.2013		

4.3	**Add New Layers / Improve Layers**						
	Improve Vegetation map Layer by including National Parks						
4.3.1	**a)** Shape files for three national parks will be provided from PURCHASER/USER. (*Related data set cleaning in progress by SIMT)	TRINITY	0%	TBD	20.11.2013	20.11.2013	
	b) Classification of species of National parks is not compatible to PEMF classification. So, Classification shall be converted to be compatible to PEMF's according to direction of PURCHASER/USER. (*Related classification of species in progress by SIMT)	TRINITY	0%	TBD	20.11.2013	20.11.2013	
	c) Add each National park FMU polygon as a member of PEMF FMU group.	TRINITY	0%	TBD	20.11.2013	20.11.2013	
4.3.2	**Improve Vegetation map Layer by including Protected area Zone 1**						
	a) Shape files for Protected area Zone 1 will be provided from PURCHASER/USER. They don't contain attributes.	TRINITY	0%	TBD	30.11.2013	30.11.2013	
	b) Add each Protected area Zone 1 polygon as a member of PEMF FMU group.	TRINITY	0%	TBD	30.11.2013	30.11.2013	
4.3.3	**Add a New Layer for MGRS Grid**						
	a) Add MGRS grid.	TRINITY	10%	TBD	30.11.2013	30.11.2013	
	b) Idea of implementation of MGRS grid can be obtained from http://dhost.info/usngweb/ (* definition of MGRS grid is different from definition of U.S. National Grid)	TRINITY	1%	TBD	30.11.2013	30.11.2013	
	c) Definition of MGRS Grid can be obtained from http://earth-info.nga.mil/GandG/coordsys/grids/mgrs.doc	TRINITY	0%	TBD	30.11.2013	30.11.2013	

	d) Suitable grids according to current zoom-in factor shall be selectable from Zone, 100km, 10km, 1km, 100m and 10m.	TRINITY	0%	TBD	30.11.2013	30.11.2013	
	Add a new Layer "Damage Forest Value Map"						
	a) Add a user privilege to enable/disable to access this map. When this layer is selected following functions shall be enabled.	TRINITY	0%	TBD	30.11.2013	30.11.2013	
	b) Allow users to draw a polygon	TRINITY	100%	TBD	30.11.2013	30.11.2013	
	c) Find intersections of the drawn polygon and subcompartments	TRINITY	100%	TBD	30.11.2013	30.11.2013	
4.3.4	**d)** As table form, the following data shall be shown for the intersected area: • CompartmentNo./SubCompartment No. • Intersected Area (ha) • Total Area of Subcompartment (ha) This value should be taken from Form9 of Inventory for corresponding subcompartment • % of intersected area over total area of subcompartment This value should be calculated by Intersected Area / total area of subcompartment x 100 • Value for the intersected area This value should be calculated as Value of Forest x % of intersected area where Value of Forest area shall be taken from corresponding field in Form 9 of Inventory • Total Value for the intersected areas	TRINITY	80%	TBD	30.11.2013	30.11.2013	
	e) Result intersection polygons shall be displayed in this layer with a color classification according to the total value for the intersected areas. User shall provide classification of colors by value.	TRINITY	0%	TBD	30.11.2013	30.11.2013	
4.3.5	**Add new layer group – CMC Operation Maps**						

4.3.5	**a)** Add a user privilege to enable/disable to access this Layer group.	TRINITY	0%	TBD	30.11.2013	30.11.2013
	b) When this layer group is selected, user is allowed to draw a polygon which is used for inner polygon searches enabled by corresponding inner polygon search switches. (see Fig.6-A)	TRINITY	0%	TBD	30.11.2013	30.11.2013
	c) State of inner polygon search switches shall be kept in a table with a relation to the user account, and when the user logs in again, the state shall be restored.	TRINITY	0%	TBD	30.11.2013	30.11.2013
	d) The node of "CMC Operation Maps" shall be expanded by default.	TRINITY	0%	TBD	30.11.2013	30.11.2013
4.3.5.1	**Add a "Resource Map" Layer**					
	a) Create and display resource icons corresponding to resource types at the coordinates specified in resource records from UNDP Database. (See Appendix B-1)	TRINITY	0%	TBD	30.11.2013	30.11.2013
	b) This is not a permanent map. Successful PROPOSER shall write code to create and replace the map once a month.	TRINITY	0%	TBD	30.11.2013	30.11.2013
	c) Add function for optional inner polygon search. Breakdown of resources in the drawn polygon shall be displayed as a table in the search result pane.	TRINITY	0%	TBD	30.11.2013	30.11.2013
4.3.5.2	**Add a "Facility inventory Map" Layer**					
	a) Create and display facility inventory icons corresponding to facility types at the coordinates specified in facility inventory records from UNDP Database. (See Appendix B-1)	TRINITY	0%	TBD	30.11.2013	30.11.2013
	b) This is not a permanent map. Successful PROPOSER shall write code to create and replace the map once a month.	TRINITY	0%	TBD	30.11.2013	30.11.2013

	c) Add function for optional inner polygon search. Breakdown of facility inventory in the drawn polygon shall be displayed as a table in the search result pane.	TRINITY	0%	TBD	30.11.2013	30.11.2013	
4.3.5.3	**Add a "Demographic Map" Layer**						
	a) Show a thematic map showing total population by color classification using border of settlements.	TRINITY	0%	TBD	30.11.2013	30.11.2013	
	b) This is not a permanent map. Successful PROPOSER shall write code to create and replace the map once a month.	TRINITY	0%	TBD	30.11.2013	30.11.2013	
	c) Demographic information will be in a database to be created by UNDP which will become accessible from MKFFIS in mid July 2013. (see Appendix B-2)	TRINITY	0%	TBD	30.11.2013	30.11.2013	
	d) Add function for optional inner polygon search. Breakdown of total population of each settlement which is intersected by the drawn polygon shall be displayed in the search result pane.	TRINITY	0%	TBD	30.11.2013	30.11.2013	
4.3.5.4	**Real-time disaster report from RCMC**						
	a) Add a user privilege to enable/disable this function	TRINITY	60%	05.10.2013	01.11.2013	01.11.2013	
	b) Users having this privilege are able to send/edit/delete disaster report. Report consists of followings. • Geographic information (polygon, line, point, icon) drawn/dropped on the MKFFIS Map Pane • Text information (Details shall be decided by USER)	TRINITY	60%	05.10.2013	01.11.2013	01.11.2013	
	c) Disaster report sent shall be stored in Disaster Report Database. (Successful PROPOSER shall prepare this database).	TRINITY	60%	05.10.2013	01.11.2013	01.11.2013	
	d) The report sent, edited, deleted shall be reflected in real time to all the MKFFIS users who are online.	TRINITY	60%	05.10.2013	01.11.2013	01.11.2013	

	e) Geographic information sent shall be displayed as a Real-time disaster Map which is one member layer of the CMC Operation Maps. (see Fig.6-A)	TRINITY	60%	05.10.2013	01.11.2013	01.11.2013	
	f) Alarm message shall be displayed upon arrival of real-time disaster report. (In a message box for example)	TRINITY	60%	05.10.2013	01.11.2013	01.11.2013	
	g) Salvage as much data as possible from ESRI Application created on ArcSDE (see APPENDIX C). Source code is not available for ESRI Application, but user account of ArcSDE database (MSSQL) will be provided.	TRINITY	0%	TBD	01.11.2013	01.11.2013	
	h) If type of disaster is forest fire; create a new CMC Forest Fire Report. (Refer to 4.6.1)	TRINITY	0%	TBD	01.11.2013	01.11.2013	
4.3.5.5	**Search disaster reports**						
	a) Add a panel for this search in the second menu item of the accordion menu in Search tab. (see Fig. 10)	TRINITY	0%	TBD	30.11.2013	30.11.2013	
	b) Only the filter by CMC classification is required. PEMF classification is not necessary.	TRINITY	0%	TBD	30.11.2013	30.11.2013	
	c) Search disaster report panel has following controls: • From Date • To Date • GCUK unit selector • RCUK unit selector • Municipality and Settlement selector • Type of events • Search Report button • Clear Result button • Print Result button	TRINITY	0%	TBD	30.11.2013	30.11.2013	
	d) Search result shall be shown in the search result pane.	TRINITY	0%	TBD	30.11.2013	30.11.2013	

	e) Color of GCUK or RCUK polygons shall be classified by the number of disasters in the polygons in the specified period.	TRINITY	0%	TBD	30.11.2013	30.11.2013	
	f) Result Map shall be displayed as a 'Disaster search result' which is one member layer of the CMC Operation Maps. (see Fig.6-A)	TRINITY	0%	TBD	30.11.2013	30.11.2013	
	g) As for Print Result function, format of printed report shall be provided by USER.	TRINITY	0%	TBD	30.11.2013	30.11.2013	
4.4	**Add New Functions to MKFFIS**						
4.4.1	**Grid Information**						
	a) Show following information of a MGRS Grid clicked. • MGRS Grid code • Summary of resources in the grid (see Appendix B-1). Resources are in a database created by UNDP which is accessible from MKFFIS. • Summary of disaster events in the grid. Disaster events are in a database created by UNDP which is accessible from MKFFIS. • Summary of facility inventories in the grid. Inventories are in a database created by UNDP which is accessible from MKFFIS. • FWI at the center of the grid. FWI grid values are kept as GeoTIFF image. • ⬜ Vegetation dryness at the center of the grid. Vegetation dryness grid values are kept as GetTIFF image.	TRINITY	10%	TBD	30.12.2013	30.12.2013	
	Demographic information						
4.4.2	**a)** Show demographic information of an administrative area clicked (National, Municipalities, Settlements). When info button is clicked, show summary, and detail table representation to be shown below on the screen.	TRINITY	0%	TBD	30.11.2013	30.11.2013	

	b) Demographic information will be in a database to be created by UNDP which will become accessible from MKFFIS in mid July 2013.	TRINITY	0%	TBD	30.11.2013	30.11.2013
	c) Demographic information to be shown on the info button and detailed table will be decided by USER.	TRINITY	0%	TBD	30.11.2013	30.11.2013
	Add means to switch Between MKFFIS for internal purpose and MKFFIS for Public					
4.4.3	**a)** Currently, MKFFIS serves for internal purpose controlling available features by user account. But another instance of MKFFIS will be installed on the Internet Server to serve public users. MKFFIS for Public can be opened without login process, but much stronger restriction will be applied. Successful PROPOSER shall add means to switch from MKFFIS for internal purpose to MKFFIS for Public. Following procedure is an example of solution. • Define a special user GUEST. • Restriction to the public user will be applied by privilege settings of user GUEST. • Add necessary exceptions applicable to GUEST user. For example, user profile of GUEST user is not kept. • Prepare PUBLIC flag in a configuration file of MKFFIS GIS. • If the flag is OFF, MKFFIS starts normally from the login page. • VI. If the flag is ON, MKFFIS skips login page and starts from the main page, setting user name to GUEST automatically.	TRINITY	0%	TBD	30.11.2013	30.11.2013
	b) Link to MKFFIS for internal purpose shall be added to the MKFFIS for public.	TRINITY	0%	TBD	30.11.2013	30.11.2013
4.4.4	**Add function to fill section 5.1 in *P2* report taking meteorological data from AWS.**		100%	25.09.2013	09.10.2013	09.10.2013

	a) Add an AWS select box next to the 'Meteorological Station' text box. (See Fig..11) AWS Names in the select box shall be taken dynamically from the 'meteorologicalstations' table in the CUK database.	SIMT	100%	25.09.2013	09.10.2013	09.10.2013	
	b) Search the meteorological data of the selected AWS which is closest to the date/time specified in the '2.2 Detection' text box.	SIMT	100%	25.09.2013	09.10.2013	09.10.2013	
	c) If there is no data between 3 hours before and after the date/time specified by the '2.2 Detection' text box, show message 'No AWS data available' and do nothing to the textboxes, otherwise fill following textboxes in the section 5.1 of P2 report. • Meteorological Station: (name of meteorological station) • hour: (hour of the meteorological data measured) • Number of days from last raining: (to fill this box some calculation is necessary) • Maximum temperature: (fill maximum temperature of the specified day) • Relative humidity • Wind Speed • Direction (Wind direction)	SIMT	100%	25.09.2013	09.10.2013	09.10.2013	
	Changes requested from Operation department from CMC about forest fire report	SIMT	100%	03.10.2013	09.10.2013	09.10.2013	
4.5	**Add New Functions/Interface to GFIS**						
	Add a link to user manual						
4.5.1	**a)** Add a link to end user manual of GFIS GIS to the tool bar.	JICA					
	b) Add a link to end user manual of GFIS Planning to the top link.	JICA					
	c) Add a link to end user manual of GFIS Fire Report to the top link.	JICA					

	d) In English mode link to the user manual of English version, and In Macedonian mode link to the user manual of Macedonian version.	JICA					
4.5.2	**Limit available FMU by user privilege**						
	a) Add a function to the GFIS Admin page in order to specify FMUs under responsibility of each user.	TRINITY	0%	TBD	30.11.2013	30.11.2013	
	b) Limit FMUs to display and/or edit according to above privilege.	TRINITY	0%	TBD	30.11.2013	30.11.2013	
	c) Limit FMUs shown in the FMU Selector according to above privilege.	TRINITY	0%	TBD	30.11.2013	30.11.2013	
	d) Zoom in FMU under responsibility of the user when that user opens GFIS GIS.	TRINITY	0%	TBD	30.11.2013	30.11.2013	
4.5.3	**Allow access to past versions of forest plan.**						
	a) Currently, if a FMU polygon is edited and uploaded, old FMU polygons will be replaced by new FMU polygons. Therefore only the latest FMUs can be seen on GFIS GIS. Successful PROPOSER under the direction of PEMF shall add function to show FMUs in a past date specified by a calendar control. Following procedures are just an example of solution: • Add a calendar control to a suitable place on GFIS GIS. • Add attributes (effective from, expired on) to each FMU. • Preset some past date such as 1900.01.01 to 'effective from' and NULL to 'expired on'. • When a new FMU is uploaded, keep the old FMU and set its 'expired on' to the updated date. • Set the updated date to the new FMU's 'effective from' and set NULL to 'expired on'. • When a past date is specified, display FMUs according to their attribute 'effective from' and 'expired on'.	TRINITY	0%	TBD	30.11.2013	30.11.2013	
4.5.4	**Search FMU by year of expiry of special plan**		0%	01.12.2013	20.12.2013	20.12.2013	

	a) Each FMU has its planning effective for ten years. And the duration is kept in the forest planning database. Successful PROPOSER under the direction of PEMF shall add a function to search FMUs which special plans expire in the year specified.	SIMT	0%	01.12.2013	20.12.2013	20.12.2013	
	Change monthly input to daily for form 3, 3a and 5		100%	15.10.2013	29.10.2013	29.10.2013	
4.5.5	**a)** Currently, data entry to the form 3, 3a and 5 is carried out on a monthly basis. Successful PROPOSER under the direction of PEMF shall modify the code to cater to daily data entry. And add two options to the print function for these forms, one is daily summary, the other is monthly summary.	SIMT	100%	15.10.2013	29.10.2013	29.10.2013	
	Keep annual achievement for 10 years in Form 6		100%	28.10.2013	06.11.2013	06.11.2013	
4.5.6	**a)** Successful PROPOSER under the direction of PEMF shall modify code and design of Form 6 data entry sheet to keep annual achievement for 10 years for each sub compartment. Items to keep are as follows. • Area (ha) • Number of seedlings • Weight of seeds (kg)	SIMT	100%	28.10.2013	06.11.2013	06.11.2013	
	Keep annual achievement for 10 years in Form *8*		100%	01.11.2013	06.11.2013	06.11.2013	
4.5.7	**a)** Successful PROPOSER under the direction of PEMF shall modify code and design of Form 8 data entry sheet to keep annual achievement for 10 years for each sub compartment. Items to keep are as follows. • Length of roads (km) • Cleared wood (m3)	SIMT	100%	01.11.2013	06.11.2013	06.11.2013	
	Fill area in Form 1 taken from polygon attribute		80%	20.11.2013	01.12.2013	01.12.2013	
4.5.8	**a)** Successful PROPOSER under the direction of PEMF shall modify code of Form 1 data entry sheet to fill area automatically taken from the attribute of polygon corresponding to selected sub compartment.	SIMT	80%	20.11.2013	01.12.2013	01.12.2013	

	Add National and Regional office level summaries to the reports in Reports/Rekapitulari menu.		100%	03.10.2013	20.10.2013	20.10.2013		
4.5.9	**a)** Currently, reports under the Reports/Rekapitulari menu are summary of selected FMU. Successful PROPOSER under the direction of PEMF shall add summary of National level and Regional Office level, and add links to corresponding summaries in the menu.	SIMT	100%	03.10.2013	20.10.2013	20.10.2013		
	b) FMUs shall be classified by regional office in order to create regional office summary.	SIMT	100%	03.10.2013	20.10.2013	20.10.2013		
6.	I**mprovement related to MKFFIS & GFIS modules**							
4.6.1	Modify PEMF Fire Report input module to report by fire.							
	a) Currently fire report is created in PEMF by each sub compartment even in case of one big fire over several compartments. On the other hand, in the CMC fire report (P2 report) is fire based, not sub compartment based. Therefore, a fire report divided into several reports by sub compartment must be merged at CMC to create P2 report for one fire. There are some complaints in PEMF for this process. • PEMF does not want redundant data entry. For example, some common fields such as start of fire and end of fire should be entered repeatedly for each related sub compartment. • PEMF has authority to identify a fire over several sub compartments, therefore merging reports by sub compartment into one fire report should be conducted by PEMF. • Fire report from PEMF does not have to be by sub compartment. Report by fire is acceptable.	SIMT	0%	06.11.2013	TBD	25.11.2013		

	b) Because P2 report module has a function to manage a report containing information of multiple sub compartments, applying the same approach to the PEMF fire report will be an elegant solution.	SIMT	0%	06.11.2013	TBD	25.11.2013	
	c) Successful PROPOSER under direction of USER shall conduct following modification.	SIMT	0%	06.11.2013	TBD	25.11.2013	
	• Modify current PEMF fire report module on GFIS Fire Report so that it can report by fire by adding functionality to manage information from multiple sub compartments.						
	• Remove MERGE PEMF REPORT function from P2 report module in MKFFIS Fire Report.						
	• Add IMPORT PEMF REPORT function to MKFFIS Fire Report						
	• Adjust P2 Report module on MKFFIS Fire Report to be able to show correctly the Fire report which was imported from PEMF REPORT						
	• Rename P2 Report as CMC Forest Fire Report.						
	• Add 'read-only' user privilege to GFIS Fire Report and MKFFIS Fire Report which allows MKFFIS user to browse PEMF fire report, and allows GFIS user to browse CMC Fire Report.						
	• Printing format of PEMF Fire Report to obtain approval of SiFH shall not be changed.						
7.	**Performance Tuning**						
4.7.1	**Performance tuning of MKFFIS**		10%				

	a) Currently, there are following complaints about speed. • MKFFIS GIS takes very long time to show the login page, if it is accessed over a long distance. For example, accessing from Japan, it takes 90 seconds to open the login page and another 90 • Speed to show FMUs is slow, and from time to time it fails to show them.	TRINITY	30%	02.10.2013	25.10.2013	25.10.2013		
	b) MKFFIS GIS shall be optimized by execution speed.	TRINITY	30%	02.10.2013	25.10.2013	25.10.2013		
	c) Optimization is not limited to source code level. All the possible factors shall be taken into account. For example, server configuration, deployment of files, network structure, use of external servers (Google server for jQuery), indexing of tables in databases, etc.	TRINITY	10%	02.10.2013	25.10.2013	25.10.2013		
	d) Improvement of performance should be shown quantitatively.	TRINITY	15%	02.10.2013	25.10.2013	25.10.2013		
4.7.2	**Performance tuning of GFIS**							
	a) Currently, there are following complaints about speed which are similar to MKFFIS GIS. • GFIS GIS takes very long time to show the login page, if it is accessed over a long distance. • Speed to show FMUs is slow, and from time to time it fails to show them.	TRINITY	0%	25.10.2013	05.11.2013	05.11.2013		
	b) GFIS GIS shall be optimized by execution speed	TRINITY	0%	25.10.2013	05.11.2013	05.11.2013		
	c) Optimization is not limited to source code level. All the possible factors shall be taken into account. For example, server configuration, deployment of files, network structure, use of external servers (Google server for jQuery), indexing of tables in databases, etc.	TRINITY	0%	25.10.2013	05.11.2013	05.11.2013		

WEEKLY PROGRESS REPORT for the period from November 1st to November 7th 2013

	d) Improvement of performance should be shown quantitatively.	TRINITY	0%	25.10.2013	05.11.2013	05.11.2013	
8.	**Installation/QA/Training/Documentation**						
4.8.1	MKFFIS and GIS Installation, Quality Assurance, Training, Documentation						
4.8.2	GFIS and GIS Installation, Quality Assurance, Training, Documentation						

4.2 Improve MKFFIS User Interface

4.3 Add New Layers / Improve Layers

4.3.5 We are having problems with the encoding of the DBA cur_registry database that holds the information for the resource, facility inventory and demographic map. Other problem is the Macedonian only version of the data. There is no English data in the database whatsoever. We have constructed a test tree view for selecting the appropriate resources and inventory data for the inner polygon search.
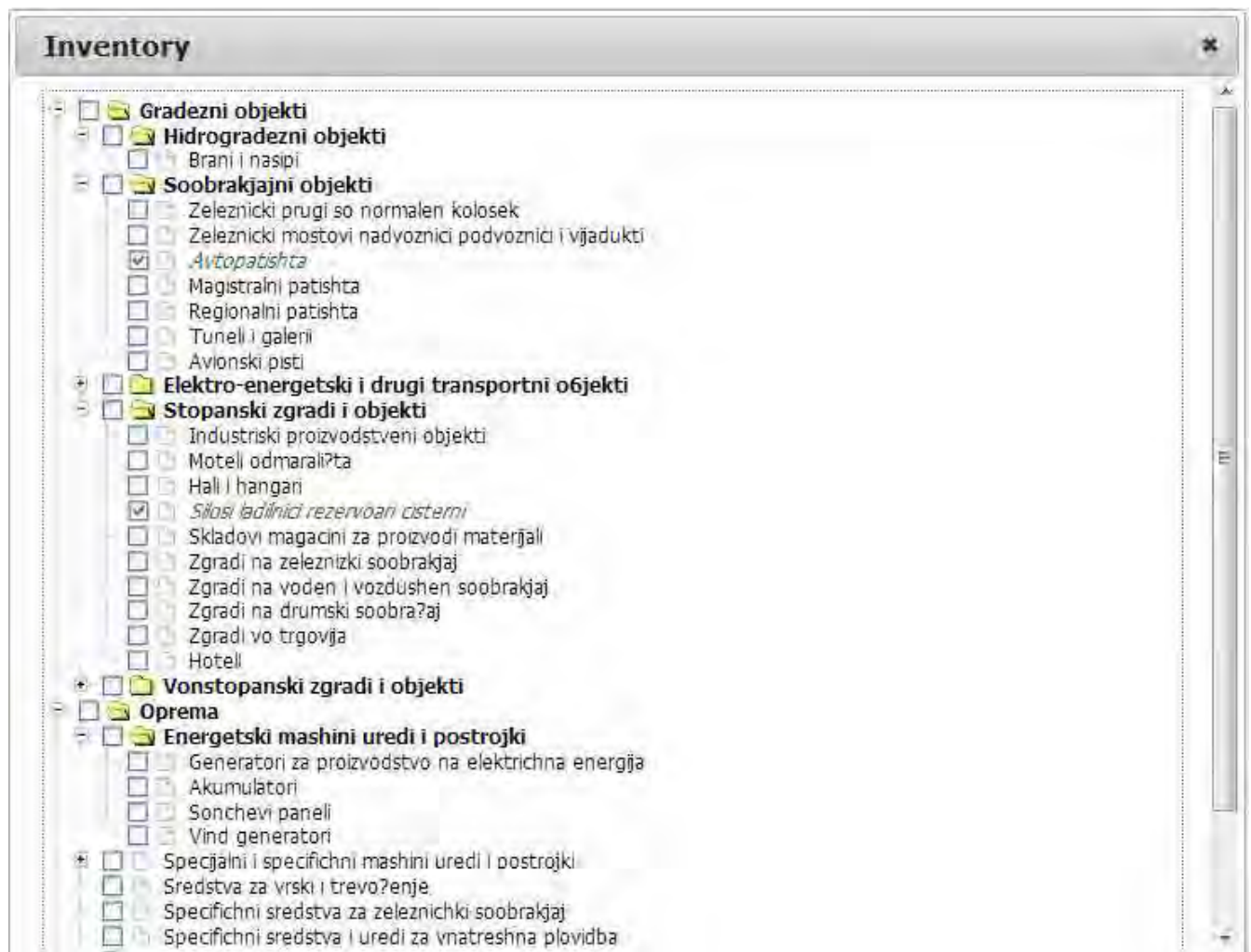
4.3.5.4 Real-time disaster report from RCMC TRINITY & SIMT
Target: MKFFIS GIS
. We have added the functionality of a point, line and polygon to be drawn and connected with an even. Now each event can be associated with multiple polygons, lines and/or points.

4.4 Add New Functions to MKFFIS

4.4.1 We have started to work on the MGRS GRID. The idea is taken from the script that Mr. Kozu created. The lines are drawn from code, but when a user select a particular section of the grid a polygon is created on top of the grid

containing the bounds of the quadrant. This is needed for getting the information via the intersection function provided by Openlayers. We are confident that the GRID will be done by 31.11.2013

4.4.4 Add function to fill section 5.1 in P2 report taking meteorological data from AWS. SIMT
Target: MKFFIS Fire Report
Waiting for test on side be CMC/JICA and approval.
Demo is on test side.

4.5 Add New Functions/Interface to GFIS

4.5.4 Search FMU by year of expiry of special plan TRINITY & SIMT
Target: GFIS GIS

4.5.5 Change monthly input to daily for form 3, 3a and 5 SIMT
Target: GFIS Planning
Waiting for test on side be PEMF/CMC/JICA and approval.
Demo is on test side.

4.5.6 Keep annual achievement for 10 years in Form 6 SIMT
Waiting for test on side be PEMF/CMC/JICA and approval.
Demo is on test side.
Target: GFIS Planning

4.5.7 Keep annual achievement for 10 years in Form 8 SIMT
Waiting for test on side be PEMF/CMC/JICA and approval.
Demo is on test side.
Target: GFIS Planning

4.5.8 Fill area in Form 1 taken from polygon attribute SIMT
Read area from shape files is done and main view is made. Update in form 1 is done. Still in testing mode from our side.
Target: GFIS Planning

4.5.9 Add National and Regional office level summaries to the reports in Reports/Rekapitulari menu. SIMT
Target: GFIS Planning
Waiting for test on side be PEMF/CMC/JICA and approval.
Demo is on test side.

4.6 Improvement related to both MKFFIS and GFIS modules

4.6.1 Modify PEMF Fire Report input module to report by fire. SIMT

4.7.1 Trinity extensively works on finding ways of fixing the performance issues. Unnecessary scripts are being deleted, performance tuning on the loading of the layers is done, external loading of the scripts is done etc.

- SD 2 -

WEEKLY PROGRESS REPORT   No.7

For period from November 8th to November 15th, 2013

Author: EDUSOFT, SIMT, TRINITY

Creation Date: November 15th, 2013

Seq. No.	Task Description	Assignee	Current % of progress	DATES			Tested Accepted by Purchaser User
				Planed Start	Planed End	Contracted/ Targeted	
4.2	**Improve MKFFIS User Interface**						
	Reform MKFFIS Left pane						
4.2.1	**a)** Remove Accordion menu, Navigation and Layers button from the left pane.	TRINITY	100%	02.10.2013	18.10.2013	10.10.2013	
	b) Add Tab control with five tabs.	TRINITY	100%	02.10.2013	18.10.2013	10.10.2013	
	c) Deploy Layers panel in the first tab named 'Layers'. This tab should be a default. (See Fig. 7)	TRINITY		02.10.2013	18.10.2013	10.10.2013	
	d) Deploy Map Selector in the second tab named 'Maps'. Show hierarchy of each map using a tree view control, except vegetation map. Show only the root node for vegetation map in the tree view. (See Fig.6) Because vegetation map has a lot of FMUs as its children, FMU selector should be accommodated in a separate tab (e). (See Fig. 8)	TRINITY	100%	02.10.2013	26.10.2013	10.10.2013	
	e) Deploy FMU selector in the third tab named 'FMU'. (See Fig. 8)	TRINITY	100%	02.10.2013	18.10.2013	10.10.2013	
	f) Deploy an accordion menu with two menu items in the fourth tab named 'Search'. Deploy Search Forest History panel in the first accordion menu item. (See Fig. 10)	TRINITY	80%	02.10.2013	01.12.2013	01.12.2013	
	g) Deploy AWS Overview panel in the fifth tab named 'AWS'. (See Fig. 9)	TRINITY	40%	02.10.2013	01.12.2013	01.12.2013	
	h) Tab names should be displayed in the language specified by the current language mode.	TRINITY	0%	02.10.2013	31.12.2013	31.12.2013	

	i) Layer settings in the Layers panel (Order of the layers, selected maps) and selected maps in the Map Selector and FMU selector shall be kept in a table with a relation to the user account, and when the user logs in again, the settings shall be restored.	TRINITY	0%	TBD	31.12.2013	31.12.2013	
	Add a link to user manual		%				
	a) Add a link to end user manual of MKFFIS GIS to the tool bar.	JICA	0%	TBD	20.11.2013	20.11.2013	
4.2.2	**b)** Add a link to end user manual of MKFFIS Fire Report to the top link.	JICA	0%	TBD	20.11.2013	20.11.2013	
	c) In English mode link to the user manual of English version, and In Macedonian mode link to the user manual of Macedonian version.	JICA	0%	TBD	20.11.2013	20.11.2013	
	Change background image seasonally		%				
4.2.3	**a)** Change background image on the login page seasonally. Image for each season will be provided by USER.	TRINITY	80%	TBD	20.11.2013	20.11.2013	
	Add a common calendar control						
	a) Currently, vegetation dryness map (VDM) and FWI map have their own calendar control independently. And each hotspot (Seviri, Modis and Modis raw) has selections of 1 day ago, 2 days ago and 3 days ago.	TRINITY	100%	.04.10.2013	26.10.2013	15.10.2013	
	b) Remove the calendar control for VDM and FWI map.	TRINITY	100%	04.10.2013	26.10.2013	15.10.2013	
	c) Remove the hot spot selections: 1 day ago, 2 days ago and 3 days ago.	TRINITY	60%	04.10.2013	22.11.2013	15.10.2013	
4.2.4	**d)** Rename hot spot selections: 'Seviri (Today)' as 'Seviri', 'Modis (Today)' as 'Modis'.	TRINITY	60%	04.10.2013	22.11.2013	15.10.2013	
	e) Add a calendar control with label 'Date' on the space where currently 'Navigation' is there. (See Fig. 7)	TRINITY	100%	TBD	26.10.2013	20.11.2013	
	f) Add a check box with label 'Now' next to the above calendar control. 'Now' shall be checked by default. *Labels should be in the language specified by current language mode.	TRINITY	100%	TBD	26.10.2013	20.11.2013	

	g) Modify code as follows: • When a past day is specified by the calendar control, clear 'Now' check box, and show VDM, FWI map hotspots and real-time disaster report (see 4.3.5.4) of the day specified. • When 'Now' check box is checked, show vegetation map, FWI map, hotspots and real-time disaster report of the current day, and keep updating these four real-time maps.	TRINITY	100%	04.10.2013	26.10.2013		15.10.20 13
4.2.5	**Display FWI Map of the previous day until today's FWI Map becomes available**						
	a) Currently, FWI Map is not shown until a day is specified by its calendar control.	TRINITY	100%	TBD	26.10.2013	20.11.2013	
	b) Modify code as follows: When 'Now' is checked (it is checked by default) FWI Map of now should be displayed. But FWI Map is created almost every day at 2pm. Therefore, it shall be displayed by the following rule. •If FWI Map of the current day exists now, display it. •Otherwise display FWI Map of one day before, if such exists. •Otherwise don't display FWI Map.	TRINITY	100%	TBD	26.10.2013	20.11.2013	
4.2.6	**Relocate vegetation map's attribute selector from Layers panel to the top of FMU selector**						
	a) Currently, attribute selectors of vegetation map are located in the Layers panel for each FMU (See Appendix A.4)	TRINITY	100%	TBD	20.11.2013	20.11.2013	
	b) Remove all the attribute selectors from the Layers panel.	TRINITY	100%	TBD	20.11.2013	20.11.2013	
	c) Add one attribute selector to the top line of FMU selector accommodated in the FMU Tab. (See Fig. 8)	TRINITY	100%	TBD	20.11.2013	20.11.2013	
	d) Modify code to apply the selected attribute to all the FMUs.	TRINITY	100%	TBD	20.11.2013	20.11.2013	

4.3	**Add New Layers / Improve Layers**						
	Improve Vegetation map Layer by including National Parks						
4.3.1	**a)** Shape files for three national parks will be provided from PURCHASER/USER. (*Related data set cleaning in progress by SIMT)	TRINITY	0%	TBD	22.11.2013	20.11.2013	
	b) Classification of species of National parks is not compatible to PEMF classification. So, Classification shall be converted to be compatible to PEMF's according to direction of PURCHASER/USER. (*Related classification of species in progress by SIMT)	TRINITY	0%	TBD	22.11.2013	20.11.2013	
	c) Add each National park FMU polygon as a member of PEMF FMU group.	TRINITY	0%	TBD	22.11.2013	20.11.2013	
4.3.2	**Improve Vegetation map Layer by including Protected area Zone 1**						
	a) Shape files for Protected area Zone 1 will be provided from PURCHASER/USER. They don't contain attributes.	TRINITY	0%	TBD	22.11.2013	30.11.2013	
	b) Add each Protected area Zone 1 polygon as a member of PEMF FMU group.	TRINITY	0%	TBD	22.11.2013	30.11.2013	
4.3.3	**Add a New Layer for MGRS Grid**						
	a) Add MGRS grid.	TRINITY	80%	TBD	30.11.2013	30.11.2013	
	b) Idea of implementation of MGRS grid can be obtained from http://dhost.info/usngweb/ (* definition of MGRS grid is different from definition of U.S. National Grid)	TRINITY	80%	TBD	30.11.2013	30.11.2013	
	c) Definition of MGRS Grid can be obtained from http://earth-info.nga.mil/GandG/coordsys/grids/mgrs.doc	TRINITY	80%	TBD	30.11.2013	30.11.2013	

	d) Suitable grids according to current zoom-in factor shall be selectable from Zone, 100km, 10km, 1km, 100m and 10m.	TRINITY	100%	TBD	30.11.2013	30.11.2013	
4.3.4	**Add a new Layer "Damage Forest Value Map"**						
	a) Add a user privilege to enable/disable to access this map. When this layer is selected following functions shall be enabled.	TRINITY	0%	TBD	30.11.2013	30.11.2013	
	b) Allow users to draw a polygon	TRINITY	100%	TBD	30.11.2013	30.11.2013	
	c) Find intersections of the drawn polygon and subcompartments	TRINITY	100%	TBD	30.11.2013	30.11.2013	
	d) As table form, the following data shall be shown for the intersected area: • CompartmentNo./SubCompartment No. • Intersected Area (ha) • Total Area of Subcompartment (ha) This value should be taken from Form9 of Inventory for corresponding subcompartment • % of intersected area over total area of subcompartment This value should be calculated by Intersected Area / total area of subcompartment x 100 • Value for the intersected area This value should be calculated as Value of Forest x % of intersected area where Value of Forest area shall be taken from corresponding field in Form 9 of Inventory • Total Value for the intersected areas	TRINITY	80%	TBD	30.11.2013	30.11.2013	
	e) Result intersection polygons shall be displayed in this layer with a color classification according to the total value for the intersected areas. User shall provide classification of colors by value. **Abandoned request. No coloring of intersected polygons.**	TRINITY	0%	TBD	30.11.2013	30.11.2013	
4.3.5	**Add new layer group – CMC Operation Maps**						

4.3.5	**a)** Add a user privilege to enable/disable to access this Layer group.	TRINITY	0%	TBD	30.11.2013	30.11.2013
	b) When this layer group is selected, user is allowed to draw a polygon which is used for inner polygon searches enabled by corresponding inner polygon search switches. (see Fig.6-A)	TRINITY	0%	TBD	30.11.2013	30.11.2013
	c) State of inner polygon search switches shall be kept in a table with a relation to the user account, and when the user logs in again, the state shall be restored.	TRINITY	0%	TBD	30.11.2013	30.11.2013
	d) The node of "CMC Operation Maps" shall be expanded by default.	TRINITY	0%	TBD	30.11.2013	30.11.2013
4.3.5.1	**Add a "Resource Map" Layer**					
	a) Create and display resource icons corresponding to resource types at the coordinates specified in resource records from UNDP Database. (See Appendix B-1)	TRINITY	70%	TBD	30.11.2013	30.11.2013
	b) This is not a permanent map. Successful PROPOSER shall write code to create and replace the map once a month.	TRINITY	0%	TBD	30.11.2013	30.11.2013
	c) Add function for optional inner polygon search. Breakdown of resources in the drawn polygon shall be displayed as a table in the search result pane.	TRINITY	0%	TBD	30.11.2013	30.11.2013
4.3.5.2	**Add a "Facility inventory Map" Layer**					
	a) Create and display facility inventory icons corresponding to facility types at the coordinates specified in facility inventory records from UNDP Database. (See Appendix B-1)	TRINITY	70%	TBD	30.11.2013	30.11.2013
	b) This is not a permanent map. Successful PROPOSER shall write code to create and replace the map once a month.	TRINITY	0%	TBD	30.11.2013	30.11.2013

	c) Add function for optional inner polygon search. Breakdown of facility inventory in the drawn polygon shall be displayed as a table in the search result pane.	TRINITY	0%	TBD	30.11.2013	30.11.2013	
4.3.5.3	**Add a "Demographic Map" Layer**						
	a) Show a thematic map showing total population by color classification using border of settlements.	TRINITY	0%	TBD	30.11.2013	30.11.2013	
	b) This is not a permanent map. Successful PROPOSER shall write code to create and replace the map once a month.	TRINITY	0%	TBD	30.11.2013	30.11.2013	
	c) Demographic information will be in a database to be created by UNDP which will become accessible from MKFFIS in mid July 2013. (see Appendix B-2)	TRINITY	0%	TBD	30.11.2013	30.11.2013	
	d) Add function for optional inner polygon search. Breakdown of total population of each settlement which is intersected by the drawn polygon shall be displayed in the search result pane.	TRINITY	0%	TBD	30.11.2013	30.11.2013	
4.3.5.4	**Real-time disaster report from RCMC**						
	a) Add a user privilege to enable/disable this function	TRINITY	60%	05.10.2013	30.11.2013	01.11.2013	
	b) Users having this privilege are able to send/edit/delete disaster report. Report consists of followings. • Geographic information (polygon, line, point, icon) drawn/dropped on the MKFFIS Map Pane • Text information (Details shall be decided by USER)	TRINITY	80%	05.10.2013	30.11.2013	01.11.2013	
	c) Disaster report sent shall be stored in Disaster Report Database. (Successful PROPOSER shall prepare this database).	TRINITY	100%	05.10.2013	01.11.2013	01.11.2013	
	d) The report sent, edited, deleted shall be reflected in real time to all the MKFFIS users who are online.	TRINITY	60%	05.10.2013	30.11.2013	01.11.2013	

	e) Geographic information sent shall be displayed as a Real-time disaster Map which is one member layer of the CMC Operation Maps. (see Fig.6-A)	TRINITY	60%	05.10.2013	30.11.2013	01.11.2013	
	f) Alarm message shall be displayed upon arrival of real-time disaster report. (In a message box for example)	TRINITY	60%	05.10.2013	30.11.2013	01.11.2013	
	g) Salvage as much data as possible from ESRI Application created on ArcSDE (see APPENDIX C). Source code is not available for ESRI Application, but user account of ArcSDE database (MSSQL) will be provided. **This is abandoned request as it's not doable**	TRINITY	0%	TBD	01.11.2013	01.11.2013	
	h) If type of disaster is forest fire; create a new CMC Forest Fire Report. (Refer to 4.6.1) **Abandoned too.**	TRINITY	0%	TBD	01.11.2013	01.11.2013	
4.3.5.5	**Search disaster reports**						
	a) Add a panel for this search in the second menu item of the accordion menu in Search tab. (see Fig. 10)	TRINITY	60%	TBD	30.11.2013	30.11.2013	
	b) Only the filter by CMC classification is required. PEMF classification is not necessary.	TRINITY	60%	TBD	30.11.2013	30.11.2013	
	c) Search disaster report panel has following controls: • From Date • To Date • GCUK unit selector • RCUK unit selector • Municipality and Settlement selector • Type of events • Search Report button • Clear Result button • Print Result button	TRINITY	60%	TBD	30.11.2013	30.11.2013	
	d) Search result shall be shown in the search result pane.	TRINITY	60%	TBD	30.11.2013	30.11.2013	

	e) Color of GCUK or RCUK polygons shall be classified by the number of disasters in the polygons in the specified period.	TRINITY	60%	TBD	30.11.2013	30.11.2013	
	f) Result Map shall be displayed as a 'Disaster search result' which is one member layer of the CMC Operation Maps. (see Fig.6-A)	TRINITY	60%	TBD	30.11.2013	30.11.2013	
	g) As for Print Result function, format of printed report shall be provided by USER.	TRINITY	0%	TBD	30.11.2013	30.11.2013	
4.4	**Add New Functions to MKFFIS**						
4.4.1	**Grid Information**						
	a) Show following information of a MGRS Grid clicked. • MGRS Grid code • Summary of resources in the grid (see Appendix B-1). Resources are in a database created by UNDP which is accessible from MKFFIS. • Summary of disaster events in the grid. Disaster events are in a database created by UNDP which is accessible from MKFFIS. • Summary of facility inventories in the grid. Inventories are in a database created by UNDP which is accessible from MKFFIS. • FWI at the center of the grid. FWI grid values are kept as GeoTIFF image. • Vegetation dryness at the center of the grid. Vegetation dryness grid values are kept as GetTIFF image.	TRINITY	60%	TBD	30.12.2013	30.12.2013	
	Demographic information						
4.4.2	**a)** Show demographic information of an administrative area clicked (National, Municipalities, Settlements). When info button is clicked, show summary, and detail table representation to be shown below on the screen.	TRINITY	0%	TBD	30.11.2013	30.11.2013	

	b) Demographic information will be in a database to be created by UNDP which will become accessible from MKFFIS in mid July 2013.	TRINITY	0%	TBD	30.11.2013	30.11.2013	
	c) Demographic information to be shown on the info button and detailed table will be decided by USER.	TRINITY	0%	TBD	30.11.2013	30.11.2013	
	Add means to switch Between MKFFIS for internal purpose and MKFFIS for Public						
4.4.3	**a)** Currently, MKFFIS serves for internal purpose controlling available features by user account. But another instance of MKFFIS will be installed on the Internet Server to serve public users. MKFFIS for Public can be opened without login process, but much stronger restriction will be applied. Successful PROPOSER shall add means to switch from MKFFIS for internal purpose to MKFFIS for Public. Following procedure is an example of solution. • Define a special user GUEST. • Restriction to the public user will be applied by privilege settings of user GUEST. • Add necessary exceptions applicable to GUEST user. For example, user profile of GUEST user is not kept. • Prepare PUBLIC flag in a configuration file of MKFFIS GIS. • If the flag is OFF, MKFFIS starts normally from the login page. • VI. If the flag is ON, MKFFIS skips login page and starts from the main page, setting user name to GUEST automatically.	TRINITY	0%	TBD	30.11.2013	30.11.2013	
	b) Link to MKFFIS for internal purpose shall be added to the MKFFIS for public.	TRINITY	0%	TBD	30.11.2013	30.11.2013	
4.4.4	**Add function to fill section 5.1 in *P2* report taking meteorological data from AWS.**		100%	25.09.2013	09.10.2013	09.10.2013	

	a) Add an AWS select box next to the 'Meteorological Station' text box. (See Fig..11) AWS Names in the select box shall be taken dynamically from the 'meteorologicalstations' table in the CUK database.	SIMT	100%	25.09.2013	09.10.2013	09.10.2013		
	b) Search the meteorological data of the selected AWS which is closest to the date/time specified in the '2.2 Detection' text box.	SIMT	100%	25.09.2013	09.10.2013	09.10.2013		
	c) If there is no data between 3 hours before and after the date/time specified by the '2.2 Detection' text box, show message 'No AWS data available' and do nothing to the textboxes, otherwise fill following textboxes in the section 5.1 of P2 report. • Meteorological Station: (name of meteorological station) • hour: (hour of the meteorological data measured) • Number of days from last raining: (to fill this box some calculation is necessary) • Maximum temperature: (fill maximum temperature of the specified day) • Relative humidity • Wind Speed • Direction (Wind direction)	SIMT	100%	25.09.2013	09.10.2013	09.10.2013		
	Changes requested from Operation department from CMC about forest fire report	SIMT	100%	03.10.2013	09.10.2013	09.10.2013		
4.5	**Add New Functions/Interface to GFIS**							
	Add a link to user manual							
4.5.1	**a)** Add a link to end user manual of GFIS GIS to the tool bar.	JICA						
	b) Add a link to end user manual of GFIS Planning to the top link.	JICA						
	c) Add a link to end user manual of GFIS Fire Report to the top link.	JICA						

	d) In English mode link to the user manual of English version, and In Macedonian mode link to the user manual of Macedonian version.	JICA					
4.5.2	**Limit available FMU by user privilege**						
	a) Add a function to the GFIS Admin page in order to specify FMUs under responsibility of each user.	TRINITY	0%	TBD	30.11.2013	30.11.2013	
	b) Limit FMUs to display and/or edit according to above privilege.	TRINITY	0%	TBD	30.11.2013	30.11.2013	
	c) Limit FMUs shown in the FMU Selector according to above privilege.	TRINITY	0%	TBD	30.11.2013	30.11.2013	
	d) Zoom in FMU under responsibility of the user when that user opens GFIS GIS.	TRINITY	0%	TBD	30.11.2013	30.11.2013	
4.5.3	**Allow access to past versions of forest plan.**						
	a) Currently, if a FMU polygon is edited and uploaded, old FMU polygons will be replaced by new FMU polygons. Therefore only the latest FMUs can be seen on GFIS GIS. Successful PROPOSER under the direction of PEMF shall add function to show FMUs in a past date specified by a calendar control. Following procedures are just an example of solution: • Add a calendar control to a suitable place on GFIS GIS. • Add attributes (effective from, expired on) to each FMU. • Preset some past date such as 1900.01.01 to 'effective from' and NULL to 'expired on'. • When a new FMU is uploaded, keep the old FMU and set its 'expired on' to the updated date. • Set the updated date to the new FMU's 'effective from' and set NULL to 'expired on'. • When a past date is specified, display FMUs according to their attribute 'effective from' and 'expired on'.	TRINITY	0%	TBD	30.11.2013	30.11.2013	
4.5.4	**Search FMU by year of expiry of special plan**		0%	01.12.2013	20.12.2013	20.12.2013	

	a) Each FMU has its planning effective for ten years. And the duration is kept in the forest planning database. Successful PROPOSER under the direction of PEMF shall add a function to search FMUs which special plans expire in the year specified.	SIMT	0%	01.12.2013	20.12.2013	20.12.2013	
4.5.5	**Change monthly input to daily for form 3, 3a and 5**		100%	15.10.2013	29.10.2013	29.10.2013	
	a) Currently, data entry to the form 3, 3a and 5 is carried out on a monthly basis. Successful PROPOSER under the direction of PEMF shall modify the code to cater to daily data entry. And add two options to the print function for these forms, one is daily summary, the other is monthly summary.	SIMT	100%	15.10.2013	29.10.2013	29.10.2013	
4.5.6	**Keep annual achievement for 10 years in Form 6**		100%	28.10.2013	06.11.2013	06.11.2013	
	a) Successful PROPOSER under the direction of PEMF shall modify code and design of Form 6 data entry sheet to keep annual achievement for 10 years for each sub compartment. Items to keep are as follows. • Area (ha) • Number of seedlings • Weight of seeds (kg)	SIMT	100%	28.10.2013	06.11.2013	06.11.2013	
4.5.7	**Keep annual achievement for 10 years in Form *8***		100%	01.11.2013	06.11.2013	06.11.2013	
	a) Successful PROPOSER under the direction of PEMF shall modify code and design of Form 8 data entry sheet to keep annual achievement for 10 years for each sub compartment. Items to keep are as follows. • Length of roads (km) • Cleared wood (m3)	SIMT	100%	01.11.2013	06.11.2013	06.11.2013	
4.5.8	**Fill area in Form 1 taken from polygon attribute**		90%	20.11.2013	01.12.2013	01.12.2013	
	a) Successful PROPOSER under the direction of PEMF shall modify code of Form 1 data entry sheet to fill area automatically taken from the attribute of polygon corresponding to selected sub compartment.	SIMT	90%	20.11.2013	01.12.2013	01.12.2013	

	Add National and Regional office level summaries to the reports in Reports/Rekapitulari menu.		100%	03.10.2013	20.10.2013	20.10.2013	
4.5.9	**a)** Currently, reports under the Reports/Rekapitulari menu are summary of selected FMU. Successful PROPOSER under the direction of PEMF shall add summary of National level and Regional Office level, and add links to corresponding summaries in the menu.	SIMT	100%	03.10.2013	20.10.2013	20.10.2013	
	b) FMUs shall be classified by regional office in order to create regional office summary.	SIMT	100%	03.10.2013	20.10.2013	20.10.2013	
6.	I**mprovement related to MKFFIS & GFIS modules**						
4.6.1	Modify PEMF Fire Report input module to report by fire.						
	a) Currently fire report is created in PEMF by each sub compartment even in case of one big fire over several compartments. On the other hand, in the CMC fire report (P2 report) is fire based, not sub compartment based. Therefore, a fire report divided into several reports by sub compartment must be merged at CMC to create P2 report for one fire. There are some complaints in PEMF for this process. • PEMF does not want redundant data entry. For example, some common fields such as start of fire and end of fire should be entered repeatedly for each related sub compartment. • PEMF has authority to identify a fire over several sub compartments, therefore merging reports by sub compartment into one fire report should be conducted by PEMF. • Fire report from PEMF does not have to be by sub compartment. Report by fire is acceptable.	SIMT	20%	06.11.2013	TBD	25.11.2013	

	b) Because P2 report module has a function to manage a report containing information of multiple sub compartments, applying the same approach to the PEMF fire report will be an elegant solution.	SIMT	20%	06.11.2013	TBD	25.11.2013	
	c) Successful PROPOSER under direction of USER shall conduct following modification. • Modify current PEMF fire report module on GFIS Fire Report so that it can report by fire by adding functionality to manage information from multiple sub compartments. • Remove MERGE PEMF REPORT function from P2 report module in MKFFIS Fire Report. • Add IMPORT PEMF REPORT function to MKFFIS Fire Report • Adjust P2 Report module on MKFFIS Fire Report to be able to show correctly the Fire report which was imported from PEMF REPORT • Rename P2 Report as CMC Forest Fire Report. • Add 'read-only' user privilege to GFIS Fire Report and MKFFIS Fire Report which allows MKFFIS user to browse PEMF fire report, and allows GFIS user to browse CMC Fire Report. • Printing format of PEMF Fire Report to obtain approval of SiFH shall not be changed.	SIMT	20%	06.11.2013	TBD	25.11.2013	
7.	**Performance Tuning**						
4.7.1	**Performance tuning of MKFFIS**		10%				

	a) Currently, there are following complaints about speed. • MKFFIS GIS takes very long time to show the login page, if it is accessed over a long distance. For example, accessing from Japan, it takes 90 seconds to open the login page and another 90 • Speed to show FMUs is slow, and from time to time it fails to show them.	TRINITY	30%	02.10.2013	25.10.2013	25.10.2013	
	b) MKFFIS GIS shall be optimized by execution speed.	TRINITY	30%	02.10.2013	25.10.2013	25.10.2013	
	c) Optimization is not limited to source code level. All the possible factors shall be taken into account. For example, server configuration, deployment of files, network structure, use of external servers (Google server for jQuery), indexing of tables in databases, etc.	TRINITY	10%	02.10.2013	25.10.2013	25.10.2013	
	d) Improvement of performance should be shown quantitatively.	TRINITY	15%	02.10.2013	25.10.2013	25.10.2013	
4.7.2	**Performance tuning of GFIS**						
	a) Currently, there are following complaints about speed which are similar to MKFFIS GIS. • GFIS GIS takes very long time to show the login page, if it is accessed over a long distance. • Speed to show FMUs is slow, and from time to time it fails to show them.	TRINITY	0%	25.10.2013	05.11.2013	05.11.2013	
	b) GFIS GIS shall be optimized by execution speed	TRINITY	0%	25.10.2013	05.11.2013	05.11.2013	
	c) Optimization is not limited to source code level. All the possible factors shall be taken into account. For example, server configuration, deployment of files, network structure, use of external servers (Google server for jQuery), indexing of tables in databases, etc.	TRINITY	0%	25.10.2013	05.11.2013	05.11.2013	

	d) Improvement of performance should be shown quantitatively.	TRINITY	0%	25.10.2013	05.11.2013	05.11.2013	
8.	**Installation/QA/Training/Documentation**						
4.8.1	MKFFIS and GIS Installation, Quality Assurance, Training, Documentation						
4.8.2	GFIS and GIS Installation, Quality Assurance, Training, Documentation						

4.4 Add New Functions to MKFFIS

4.4.1 We have started to work on the MGRS GRID. The idea is taken from the script that Mr. Kozu created. The lines are drawn from code, but when a user select a particular section of the grid a polygon is created on top of the grid containing the bounds of the quadrant. This is needed for getting the information via the intersection function provided by Openlayers. We are confident that the GRID will be done by 31.11.2013

4.4.4 Add function to fill section 5.1 in P2 report taking meteorological data from AWS. SIMT
Target: MKFFIS Fire Report
Waiting for test on side be CMC/JICA and approval.
Demo is on test side.

4.5 Add New Functions/Interface to GFIS

4.5.4 Search FMU by year of expiry of special plan TRINITY & SIMT
Target: GFIS GIS

4.5.5 Change monthly input to daily for form 3, 3a and 5 SIMT
Target: GFIS Planning
Waiting for test on side be PEMF/CMC/JICA and approval.
Demo is on test side.

4.5.6 Keep annual achievement for 10 years in Form 6 SIMT
Waiting for test on side be PEMF/CMC/JICA and approval.
Demo is on test side.
Target: GFIS Planning

4.5.7 Keep annual achievement for 10 years in Form 8 SIMT
Waiting for test on side be PEMF/CMC/JICA and approval.
Demo is on test side.
Target: GFIS Planning

4.5.8 Fill area in Form 1 taken from polygon attribute SIMT
Only translating need to be done.
Target: GFIS Planning

4.5.9 Add National and Regional office level summaries to the reports in Reports/Rekapitulari menu. SIMT
Target: GFIS Planning
Waiting for test on side be PEMF/CMC/JICA and approval.
Demo is on test side.

4.6 Improvement related to both MKFFIS and GFIS modules

4.6.1 Modify PEMF Fire Report input module to report by fire. SIMT
Changes in the main input form for forest fire report is made.

4.7.1 Trinity extensively works on finding ways of fixing the performance issues. Unnecessary scripts are being deleted, performance tuning on the loading of the layers is done, external loading of the scripts is done etc.

- SD 2 -

WEEKLY PROGRESS REPORT   No.8

For period from November 15th to November 22th, 2013

Author: EDUSOFT, SIMT, TRINITY

Creation Date: November 22th, 2013

WEEKLY PROGRESS REPORT for the period from November 15st to November 22th 2013

| Seq. No. | Task Description | Assignee | Current % of progress | DATES | | | Tested Accepted by Purchaser User |
				Planed Start	Planed End	Contracted/ Targeted	
4.2	**Improve MKFFIS User Interface**						
	Reform MKFFIS Left pane						
4.2.1	**a)** Remove Accordion menu, Navigation and Layers button from the left pane.	TRINITY	100%	02.10.2013	18.10.2013	10.10.2013	
	b) Add Tab control with five tabs.	TRINITY	100%	02.10.2013	18.10.2013	10.10.2013	
	c) Deploy Layers panel in the first tab named 'Layers'. This tab should be a default. (See Fig. 7)	TRINITY		02.10.2013	18.10.2013	10.10.2013	
	d) Deploy Map Selector in the second tab named 'Maps'. Show hierarchy of each map using a tree view control, except vegetation map. Show only the root node for vegetation map in the tree view. (See Fig.6) Because vegetation map has a lot of FMUs as its children, FMU selector should be accommodated in a separate tab (e). (See Fig. 8)	TRINITY	100%	02.10.2013	26.10.2013	10.10.2013	
	e) Deploy FMU selector in the third tab named 'FMU'. (See Fig. 8)	TRINITY	100%	02.10.2013	18.10.2013	10.10.2013	
	f) Deploy an accordion menu with two menu items in the fourth tab named 'Search'. Deploy Search Forest History panel in the first accordion menu item. (See Fig. 10)	TRINITY	80%	02.10.2013	01.12.2013	01.12.2013	
	g) Deploy AWS Overview panel in the fifth tab named 'AWS'. (See Fig. 9)	TRINITY	40%	02.10.2013	01.12.2013	01.12.2013	
	h) Tab names should be displayed in the language specified by the current language mode.	TRINITY	0%	02.10.2013	31.12.2013	31.12.2013	

	i) Layer settings in the Layers panel (Order of the layers, selected maps) and selected maps in the Map Selector and FMU selector shall be kept in a table with a relation to the user account, and when the user logs in again, the settings shall be restored.	TRINITY	10%	TBD	31.12.2013	31.12.2013	
4.2.2	**Add a link to user manual**		%				
	a) Add a link to end user manual of MKFFIS GIS to the tool bar.	JICA	0%	TBD	20.11.2013	20.11.2013	
	b) Add a link to end user manual of MKFFIS Fire Report to the top link.	JICA	0%	TBD	20.11.2013	20.11.2013	
	c) In English mode link to the user manual of English version, and In Macedonian mode link to the user manual of Macedonian version.	JICA	0%	TBD	20.11.2013	20.11.2013	
4.2.3	**Change background image seasonally**		%				
	a) Change background image on the login page seasonally. Image for each season will be provided by USER.	TRINITY	100%	TBD	20.11.2013	20.11.2013	
4.2.4	**Add a common calendar control**						
	a) Currently, vegetation dryness map (VDM) and FWI map have their own calendar control independently. And each hotspot (Seviri, Modis and Modis raw) has selections of 1 day ago, 2 days ago and 3 days ago.	TRINITY	100%	.04.10.2013	26.10.2013	15.10.2013	
	b) Remove the calendar control for VDM and FWI map.	TRINITY	100%	04.10.2013	26.10.2013	15.10.2013	
	c) Remove the hot spot selections: 1 day ago, 2 days ago and 3 days ago.	TRINITY	100%	04.10.2013	22.11.2013	15.10.2013	
	d) Rename hot spot selections: 'Seviri (Today)' as 'Seviri', 'Modis (Today)' as 'Modis'.	TRINITY	100%	04.10.2013	22.11.2013	15.10.2013	
	e) Add a calendar control with label 'Date' on the space where currently 'Navigation' is there. (See Fig. 7)	TRINITY	100%	TBD	26.10.2013	20.11.2013	
	f) Add a check box with label 'Now' next to the above calendar control. 'Now' shall be checked by default. *Labels should be in the language specified by current language mode.	TRINITY	100%	TBD	26.10.2013	20.11.2013	

	g) Modify code as follows: • When a past day is specified by the calendar control, clear 'Now' check box, and show VDM, FWI map hotspots and real-time disaster report (see 4.3.5.4) of the day specified. • When 'Now' check box is checked, show vegetation map, FWI map, hotspots and real-time disaster report of the current day, and keep updating these four real-time maps.	TRINITY	100%	04.10.2013	26.10.2013			15.10.20 13
4.2.5	**Display FWI Map of the previous day until today's FWI Map becomes available**							
	a) Currently, FWI Map is not shown until a day is specified by its calendar control.	TRINITY	100%	TBD	26.10.2013	20.11.2013		
	b) Modify code as follows: When 'Now' is checked (it is checked by default) FWI Map of now should be displayed. But FWI Map is created almost every day at 2pm. Therefore, it shall be displayed by the following rule. •If FWI Map of the current day exists now, display it. •Otherwise display FWI Map of one day before, if such exists. •Otherwise don't display FWI Map.	TRINITY	100%	TBD	26.10.2013	20.11.2013		
4.2.6	**Relocate vegetation map's attribute selector from Layers panel to the top of FMU selector**							
	a) Currently, attribute selectors of vegetation map are located in the Layers panel for each FMU (See Appendix A.4)	TRINITY	100%	TBD	20.11.2013	20.11.2013		
	b) Remove all the attribute selectors from the Layers panel.	TRINITY	100%	TBD	20.11.2013	20.11.2013		
	c) Add one attribute selector to the top line of FMU selector accommodated in the FMU Tab. (See Fig. 8)	TRINITY	100%	TBD	20.11.2013	20.11.2013		
	d) Modify code to apply the selected attribute to all the FMUs.	TRINITY	100%	TBD	20.11.2013	20.11.2013		

4.3	Add New Layers / Improve Layers						
	Improve Vegetation map Layer by including National Parks						
4.3.1	**a)** Shape files for three national parks will be provided from PURCHASER/USER. (*Related data set cleaning in progress by SIMT)	TRINITY	5%	TBD	29.11.2013	20.11.2013	
	b) Classification of species of National parks is not compatible to PEMF classification. So, Classification shall be converted to be compatible to PEMF's according to direction of PURCHASER/USER. (*Related classification of species in progress by SIMT)	TRINITY	5%	TBD	29.11.2013	20.11.2013	
	c) Add each National park FMU polygon as a member of PEMF FMU group.	TRINITY	5%	TBD	29.11.2013	20.11.2013	
4.3.2	**Improve Vegetation map Layer by including Protected area Zone 1**						
	a) Shape files for Protected area Zone 1 will be provided from PURCHASER/USER. They don't contain attributes.	TRINITY	5%	TBD	29.11.2013	30.11.2013	
	b) Add each Protected area Zone 1 polygon as a member of PEMF FMU group.	TRINITY	5%	TBD	29.11.2013	30.11.2013	
4.3.3	**Add a New Layer for MGRS Grid**						
	a) Add MGRS grid.	TRINITY	100%	TBD	30.11.2013	30.11.2013	
	b) Idea of implementation of MGRS grid can be obtained from http://dhost.info/usngweb/ (* definition of MGRS grid is different from definition of U.S. National Grid)	TRINITY	100%	TBD	30.11.2013	30.11.2013	
	c) Definition of MGRS Grid can be obtained from http://earth-info.nga.mil/GandG/coordsys/grids/mgrs.doc	TRINITY	100%	TBD	30.11.2013	30.11.2013	

	d) Suitable grids according to current zoom-in factor shall be selectable from Zone, 100km, 10km, 1km, 100m and 10m.	TRINITY	100%	TBD	30.11.2013	30.11.2013	
	Add a new Layer "Damage Forest Value Map"					
	a) Add a user privilege to enable/disable to access this map. When this layer is selected following functions shall be enabled.	TRINITY	90%	TBD	30.11.2013	30.11.2013	
	b) Allow users to draw a polygon	TRINITY	100%	TBD	30.11.2013	30.11.2013	
	c) Find intersections of the drawn polygon and subcompartments	TRINITY	100%	TBD	30.11.2013	30.11.2013	
4.3.4	**d)** As table form, the following data shall be shown for the intersected area: • CompartmentNo./SubCompartment No. • Intersected Area (ha) • Total Area of Subcompartment (ha) This value should be taken from Form9 of Inventory for corresponding subcompartment • % of intersected area over total area of subcompartment This value should be calculated by Intersected Area / total area of subcompartment x 100 • Value for the intersected area This value should be calculated as Value of Forest x % of intersected area where Value of Forest area shall be taken from corresponding field in Form 9 of Inventory • Total Value for the intersected areas	TRINITY	80%	TBD	30.11.2013	30.11.2013	
	e) Result intersection polygons shall be displayed in this layer with a color classification according to the total value for the intersected areas. User shall provide classification of colors by value.	TRINITY	0%	TBD	30.11.2013	30.11.2013	
4.3.5	**Add new layer group – CMC Operation Maps**					

4.3.5	**a)** Add a user privilege to enable/disable to access this Layer group.	TRINITY	90%	TBD	30.11.2013	30.11.2013
	b) When this layer group is selected, user is allowed to draw a polygon which is used for inner polygon searches enabled by corresponding inner polygon search switches. (see Fig.6-A)	TRINITY	0%	TBD	30.11.2013	30.11.2013
	c) State of inner polygon search switches shall be kept in a table with a relation to the user account, and when the user logs in again, the state shall be restored.	TRINITY	0%	TBD	30.11.2013	30.11.2013
	d) The node of "CMC Operation Maps" shall be expanded by default.	TRINITY	100%	TBD	30.11.2013	30.11.2013
4.3.5.1	**Add a "Resource Map" Layer**					
	a) Create and display resource icons corresponding to resource types at the coordinates specified in resource records from UNDP Database. (See Appendix B-1)	TRINITY	90%	TBD	30.11.2013	30.11.2013
	b) This is not a permanent map. Successful PROPOSER shall write code to create and replace the map once a month.	TRINITY	90%	TBD	30.11.2013	30.11.2013
	c) Add function for optional inner polygon search. Breakdown of resources in the drawn polygon shall be displayed as a table in the search result pane.	TRINITY	0%	TBD	30.11.2013	30.11.2013
4.3.5.2	**Add a "Facility inventory Map" Layer**					
	a) Create and display facility inventory icons corresponding to facility types at the coordinates specified in facility inventory records from UNDP Database. (See Appendix B-1)	TRINITY	90%	TBD	30.11.2013	30.11.2013
	b) This is not a permanent map. Successful PROPOSER shall write code to create and replace the map once a month.	TRINITY	90%	TBD	30.11.2013	30.11.2013

	c) Add function for optional inner polygon search. Breakdown of facility inventory in the drawn polygon shall be displayed as a table in the search result pane.	TRINITY	0%	TBD	30.11.2013	30.11.2013	
4.3.5.3	**Add a "Demographic Map" Layer**						
	a) Show a thematic map showing total population by color classification using border of settlements.	TRINITY	0%	TBD	30.11.2013	30.11.2013	
	b) This is not a permanent map. Successful PROPOSER shall write code to create and replace the map once a month.	TRINITY	0%	TBD	30.11.2013	30.11.2013	
	c) Demographic information will be in a database to be created by UNDP which will become accessible from MKFFIS in mid July 2013. (see Appendix B-2)	TRINITY	0%	TBD	30.11.2013	30.11.2013	
	d) Add function for optional inner polygon search. Breakdown of total population of each settlement which is intersected by the drawn polygon shall be displayed in the search result pane.	TRINITY	0%	TBD	30.11.2013	30.11.2013	
4.3.5.4	**Real-time disaster report from RCMC**						
	a) Add a user privilege to enable/disable this function	TRINITY	90%	05.10.2013	30.11.2013	01.11.2013	
	b) Users having this privilege are able to send/edit/delete disaster report. Report consists of followings. • Geographic information (polygon, line, point, icon) drawn/dropped on the MKFFIS Map Pane • Text information (Details shall be decided by USER)	TRINITY	90%	05.10.2013	30.11.2013	01.11.2013	
	c) Disaster report sent shall be stored in Disaster Report Database. (Successful PROPOSER shall prepare this database).	TRINITY	100%	05.10.2013	01.11.2013	01.11.2013	
	d) The report sent, edited, deleted shall be reflected in real time to all the MKFFIS users who are online.	TRINITY	100%	05.10.2013	30.11.2013	01.11.2013	

	e) Geographic information sent shall be displayed as a Real-time disaster Map which is one member layer of the CMC Operation Maps. (see Fig.6-A)	TRINITY	100%	05.10.2013	30.11.2013	01.11.2013	
	f) Alarm message shall be displayed upon arrival of real-time disaster report. (In a message box for example)	TRINITY	60%	05.10.2013	30.11.2013	01.11.2013	
	g) Salvage as much data as possible from ESRI Application created on ArcSDE (see APPENDIX C). Source code is not available for ESRI Application, but user account of ArcSDE database (MSSQL) will be provided.	TRINITY	0%	TBD	01.11.2013	01.11.2013	
	h) If type of disaster is forest fire; create a new CMC Forest Fire Report. (Refer to 4.6.1)	TRINITY	0%	TBD	01.11.2013	01.11.2013	
4.3.5.5	**Search disaster reports**						
	a) Add a panel for this search in the second menu item of the accordion menu in Search tab. (see Fig. 10)	TRINITY	60%	TBD	30.11.2013	30.11.2013	
	b) Only the filter by CMC classification is required. PEMF classification is not necessary.	TRINITY	60%	TBD	30.11.2013	30.11.2013	
	c) Search disaster report panel has following controls: • From Date • To Date • GCUK unit selector • RCUK unit selector • Municipality and Settlement selector • Type of events • Search Report button • Clear Result button • Print Result button	TRINITY	60%	TBD	30.11.2013	30.11.2013	
	d) Search result shall be shown in the search result pane.	TRINITY	60%	TBD	30.11.2013	30.11.2013	

	e) Color of GCUK or RCUK polygons shall be classified by the number of disasters in the polygons in the specified period.	TRINITY	60%	TBD	30.11.2013	30.11.2013	
	f) Result Map shall be displayed as a 'Disaster search result' which is one member layer of the CMC Operation Maps. (see Fig.6-A)	TRINITY	60%	TBD	30.11.2013	30.11.2013	
	g) As for Print Result function, format of printed report shall be provided by USER.	TRINITY	0%	TBD	30.11.2013	30.11.2013	
4.4	**Add New Functions to MKFFIS**						
4.4.1	**Grid Information**						
	a) Show following information of a MGRS Grid clicked. • MGRS Grid code • Summary of resources in the grid (see Appendix B-1). Resources are in a database created by UNDP which is accessible from MKFFIS. • Summary of disaster events in the grid. Disaster events are in a database created by UNDP which is accessible from MKFFIS. • Summary of facility inventories in the grid. Inventories are in a database created by UNDP which is accessible from MKFFIS. • FWI at the center of the grid. FWI grid values are kept as GeoTIFF image. • ⬜ Vegetation dryness at the center of the grid. Vegetation dryness grid values are kept as GetTIFF image.	TRINITY	60%	TBD	30.12.2013	30.12.2013	
	Demographic information						
4.4.2	**a)** Show demographic information of an administrative area clicked (National, Municipalities, Settlements). When info button is clicked, show summary, and detail table representation to be shown below on the screen.	TRINITY	0%	TBD	30.11.2013	30.11.2013	

	b) Demographic information will be in a database to be created by UNDP which will become accessible from MKFFIS in mid July 2013.	TRINITY	0%	TBD	30.11.2013	30.11.2013	
	c) Demographic information to be shown on the info button and detailed table will be decided by USER.	TRINITY	0%	TBD	30.11.2013	30.11.2013	
	Add means to switch Between MKFFIS for internal purpose and MKFFIS for Public						
4.4.3	**a)** Currently, MKFFIS serves for internal purpose controlling available features by user account. But another instance of MKFFIS will be installed on the Internet Server to serve public users. MKFFIS for Public can be opened without login process, but much stronger restriction will be applied. Successful PROPOSER shall add means to switch from MKFFIS for internal purpose to MKFFIS for Public. Following procedure is an example of solution. • Define a special user GUEST. • Restriction to the public user will be applied by privilege settings of user GUEST. • Add necessary exceptions applicable to GUEST user. For example, user profile of GUEST user is not kept. • Prepare PUBLIC flag in a configuration file of MKFFIS GIS. • If the flag is OFF, MKFFIS starts normally from the login page. • VI. If the flag is ON, MKFFIS skips login page and starts from the main page, setting user name to GUEST automatically.	TRINITY	0%	TBD	30.11.2013	30.11.2013	
	b) Link to MKFFIS for internal purpose shall be added to the MKFFIS for public.	TRINITY	0%	TBD	30.11.2013	30.11.2013	
4.4.4	**Add function to fill section 5.1 in *P2* report taking meteorological data from AWS.**		100%	25.09.2013	09.10.2013	09.10.2013	

	a) Add an AWS select box next to the 'Meteorological Station' text box. (See Fig..11) AWS Names in the select box shall be taken dynamically from the 'meteorologicalstations' table in the CUK database.	SIMT	100%	25.09.2013	09.10.2013	09.10.2013	
	b) Search the meteorological data of the selected AWS which is closest to the date/time specified in the '2.2 Detection' text box.	SIMT	100%	25.09.2013	09.10.2013	09.10.2013	
	c) If there is no data between 3 hours before and after the date/time specified by the '2.2 Detection' text box, show message 'No AWS data available' and do nothing to the textboxes, otherwise fill following textboxes in the section 5.1 of P2 report. • Meteorological Station: (name of meteorological station) • hour: (hour of the meteorological data measured) • Number of days from last raining: (to fill this box some calculation is necessary) • Maximum temperature: (fill maximum temperature of the specified day) • Relative humidity • Wind Speed • Direction (Wind direction)	SIMT	100%	25.09.2013	09.10.2013	09.10.2013	
	Changes requested from Operation department from CMC about forest fire report	SIMT	100%	03.10.2013	09.10.2013	09.10.2013	
4.5	**Add New Functions/Interface to GFIS**						
	Add a link to user manual						
	a) Add a link to end user manual of GFIS GIS to the tool bar.	JICA					
4.5.1	**b)** Add a link to end user manual of GFIS Planning to the top link.	JICA					
	c) Add a link to end user manual of GFIS Fire Report to the top link.	JICA					

	d) In English mode link to the user manual of English version, and In Macedonian mode link to the user manual of Macedonian version.	JICA					
4.5.2	**Limit available FMU by user privilege**						
	a) Add a function to the GFIS Admin page in order to specify FMUs under responsibility of each user.	TRINITY	0%	TBD	30.11.2013	30.11.2013	
	b) Limit FMUs to display and/or edit according to above privilege.	TRINITY	0%	TBD	30.11.2013	30.11.2013	
	c) Limit FMUs shown in the FMU Selector according to above privilege.	TRINITY	0%	TBD	30.11.2013	30.11.2013	
	d) Zoom in FMU under responsibility of the user when that user opens GFIS GIS.	TRINITY	0%	TBD	30.11.2013	30.11.2013	
4.5.3	**Allow access to past versions of forest plan.**						
	a) Currently, if a FMU polygon is edited and uploaded, old FMU polygons will be replaced by new FMU polygons. Therefore only the latest FMUs can be seen on GFIS GIS. Successful PROPOSER under the direction of PEMF shall add function to show FMUs in a past date specified by a calendar control. Following procedures are just an example of solution: • Add a calendar control to a suitable place on GFIS GIS. • Add attributes (effective from, expired on) to each FMU. • Preset some past date such as 1900.01.01 to 'effective from' and NULL to 'expired on'. • When a new FMU is uploaded, keep the old FMU and set its 'expired on' to the updated date. • Set the updated date to the new FMU's 'effective from' and set NULL to 'expired on'. • When a past date is specified, display FMUs according to their attribute 'effective from' and 'expired on'.	TRINITY	0%	TBD	30.11.2013	30.11.2013	
4.5.4	**Search FMU by year of expiry of special plan**		50%	15.11.2013	01.12.2013	01.12.2013	

	a) Each FMU has its planning effective for ten years. And the duration is kept in the forest planning database. Successful PROPOSER under the direction of PEMF shall add a function to search FMUs which special plans expire in the year specified.	SIMT	50%	15.11.2013	01.12.2013	01.12.2013	
4.5.5	**Change monthly input to daily for form 3, 3a and 5**		100%	15.10.2013	29.10.2013	29.10.2013	
	a) Currently, data entry to the form 3, 3a and 5 is carried out on a monthly basis. Successful PROPOSER under the direction of PEMF shall modify the code to cater to daily data entry. And add two options to the print function for these forms, one is daily summary, the other is monthly summary.	SIMT	100%	15.10.2013	29.10.2013	29.10.2013	
4.5.6	**Keep annual achievement for 10 years in Form 6**		100%	28.10.2013	06.11.2013	06.11.2013	
	a) Successful PROPOSER under the direction of PEMF shall modify code and design of Form 6 data entry sheet to keep annual achievement for 10 years for each sub compartment. Items to keep are as follows. • Area (ha) • Number of seedlings • Weight of seeds (kg)	SIMT	100%	28.10.2013	06.11.2013	06.11.2013	
4.5.7	**Keep annual achievement for 10 years in Form *8***		100%	01.11.2013	06.11.2013	06.11.2013	
	a) Successful PROPOSER under the direction of PEMF shall modify code and design of Form 8 data entry sheet to keep annual achievement for 10 years for each sub compartment. Items to keep are as follows. • Length of roads (km) • Cleared wood (m3)	SIMT	100%	01.11.2013	06.11.2013	06.11.2013	
4.5.8	**Fill area in Form 1 taken from polygon attribute**		90%	10.11.2013	25.11.2013	25.12.2013	
	a) Successful PROPOSER under the direction of PEMF shall modify code of Form 1 data entry sheet to fill area automatically taken from the attribute of polygon corresponding to selected sub compartment.	SIMT	90%	10.11.2013	25.11.2013	25.12.2013	

	Add National and Regional office level summaries to the reports in Reports/Rekapitulari menu.		100%	03.10.2013	20.10.2013	20.10.2013	
4.5.9	**a)** Currently, reports under the Reports/Rekapitulari menu are summary of selected FMU. Successful PROPOSER under the direction of PEMF shall add summary of National level and Regional Office level, and add links to corresponding summaries in the menu.	SIMT	100%	03.10.2013	20.10.2013	20.10.2013	
	b) FMUs shall be classified by regional office in order to create regional office summary.	SIMT	100%	03.10.2013	20.10.2013	20.10.2013	
4.5.10*	**NEW REQUEST - Add middle aged forest in PEMF**	SIMT	0%	01.12.2013	TBD	TBD	
	a) **Add in the input form selection for middle aged forest in form 2a**	SIMT	0%	01.12.2013	10.12.2013	10.12.2013	
	b) **Add group section in the reports for forest**	SIMT	0%	TBD	TBD	TBD	
6.	I**mprovement related to MKFFIS & GFIS modules**						
4.6.1	Modify PEMF Fire Report input module to report by fire.	SIMT	40%	06.11.2013	01.12.2013	01.12.2013	

a) Currently fire report is created in PEMF by each sub compartment even in case of one big fire over several compartments. On the other hand, in the CMC fire report (P2 report) is fire based, not sub compartment based. Therefore, a fire report divided into several reports by sub compartment must be merged at CMC to create P2 report for one fire. There are some complaints in PEMF for this process. • PEMF does not want redundant data entry. For example, some common fields such as start of fire and end of fire should be entered repeatedly for each related sub compartment. • PEMF has authority to identify a fire over several sub compartments, therefore merging reports by sub compartment into one fire report should be conducted by PEMF. • Fire report from PEMF does not have to be by sub compartment. Report by fire is acceptable.	SIMT	40%	06.11.2013	01.12.2013	01.12.2013	
b) Because P2 report module has a function to manage a report containing information of multiple sub compartments, applying the same approach to the PEMF fire report will be an elegant solution.	SIMT	40%	06.11.2013	01.12.2013	01.12.2013	

	c) Successful PROPOSER under direction of USER shall conduct following modification. • Modify current PEMF fire report module on GFIS Fire Report so that it can report by fire by adding functionality to manage information from multiple sub compartments. • Remove MERGE PEMF REPORT function from P2 report module in MKFFIS Fire Report. • Add IMPORT PEMF REPORT function to MKFFIS Fire Report • Adjust P2 Report module on MKFFIS Fire Report to be able to show correctly the Fire report which was imported from PEMF REPORT • Rename P2 Report as CMC Forest Fire Report. • Add 'read-only' user privilege to GFIS Fire Report and MKFFIS Fire Report which allows MKFFIS user to browse PEMF fire report, and allows GFIS user to browse CMC Fire Report. • Printing format of PEMF Fire Report to obtain approval of SiFH shall not be changed.	SIMT	40%	06.11.2013	01.12.2013	01.12.2013	
7.	**Performance Tuning**						
	Performance tuning of MKFFIS		10%				
4.7.1	**a)** Currently, there are following complaints about speed. • MKFFIS GIS takes very long time to show the login page, if it is accessed over a long distance. For example, accessing from Japan, it takes 90 seconds to open the login page and another 90 • Speed to show FMUs is slow, and from time to time it fails to show them.	TRINITY	30%	02.10.2013	25.10.2013	25.10.2013	
	b) MKFFIS GIS shall be optimized by execution speed.	TRINITY	30%	02.10.2013	25.10.2013	25.10.2013	

	c) Optimization is not limited to source code level. All the possible factors shall be taken into account. For example, server configuration, deployment of files, network structure, use of external servers (Google server for jQuery), indexing of tables in databases, etc.	TRINITY	10%	02.10.2013	25.10.2013	25.10.2013		
	d) Improvement of performance should be shown quantitatively.	TRINITY	15%	02.10.2013	25.10.2013	25.10.2013		
	Performance tuning of GFIS							
4.7.2	**a)** Currently, there are following complaints about speed which are similar to MKFFIS GIS. • GFIS GIS takes very long time to show the login page, if it is accessed over a long distance. • Speed to show FMUs is slow, and from time to time it fails to show them.	TRINITY	0%	25.10.2013	05.11.2013	05.11.2013		
	b) GFIS GIS shall be optimized by execution speed	TRINITY	0%	25.10.2013	05.11.2013	05.11.2013		
	c) Optimization is not limited to source code level. All the possible factors shall be taken into account. For example, server configuration, deployment of files, network structure, use of external servers (Google server for jQuery), indexing of tables in databases, etc.	TRINITY	0%	25.10.2013	05.11.2013	05.11.2013		
	d) Improvement of performance should be shown quantitatively.	TRINITY	0%	25.10.2013	05.11.2013	05.11.2013		
8.	**Installation/QA/Training/Documentation**							
4.8.1	MKFFIS and GIS Installation, Quality Assurance, Training, Documentation							
4.8.2	GFIS and GIS Installation, Quality Assurance, Training, Documentation							

4.4 Add New Functions to MKFFIS

4.4.1 We have started to work on the MGRS GRID. The idea is taken from the script that Mr. Kozu created. The lines are drawn from code, but when a user select a particular section of the grid a polygon is created on top of the grid containing the bounds of the quadrant. This is needed for getting the information via the intersection function provided by Openlayers. We are confident that the GRID will be done by 31.11.2013

4.4.4 Add function to fill section 5.1 in P2 report taking meteorological data from AWS. SIMT
Target: MKFFIS Fire Report
Waiting for test on side be CMC/JICA and approval.
Demo is on test side.

4.5 Add New Functions/Interface to GFIS

4.5.4 Search FMU by year of expiry of special plan SIMT
Target: GFIS Planning
History for forms 1, 3a, 4, 5, 6, 7, 8 and 9 with printing is done and login page with choose of history is done. Still forms 2, 2a and 3 need to be done, and also reports according to the history plan.
Demo is on test side.

4.5.5 Change monthly input to daily for form 3, 3a and 5 SIMT
Target: GFIS Planning
Waiting for test on side be PEMF/CMC/JICA and approval.
Demo is on test side.

4.5.6 Keep annual achievement for 10 years in Form 6 SIMT
Waiting for test on side be PEMF/CMC/JICA and approval.
Demo is on test side.
Target: GFIS Planning

4.5.7 Keep annual achievement for 10 years in Form 8 SIMT
Waiting for test on side be PEMF/CMC/JICA and approval.
Demo is on test side.
Target: GFIS Planning

4.5.8 Fill area in Form 1 taken from polygon attribute SIMT
Translation to English need to be done. Demo is on test side.
Target: GFIS Planning

4.5.9 Add National and Regional office level summaries to the reports in Reports/Rekapitulari menu. SIMT
Target: GFIS Planning
Waiting for test on side be PEMF/CMC/JICA and approval.
Demo is on test side.

4.6 Improvement related to both MKFFIS and GFIS modules

4.6.1 Modify PEMF Fire Report input module to report by fire. SIMT
Input form is done for insert and editing. Printing is done. Demo is on test server. Initial testing and transfer to CMC Forest Fire report need to be done. Demo is on test side.

4.7.1 Trinity extensively works on finding ways of fixing the performance issues. Unnecessary scripts are being deleted, performance tuning on the loading of the layers is done, external loading of the scripts is done etc.

Presentation

At Wednesday, 20.11.2013, SIMT made presentation of the new modules from SD2 that is done so far. Main agreement/remark was that function 4.5.9 is main benefit from the new functions to the planning engineers and other function will be very useful for employees in the regional centers, but not for planning engineers. That's why we should think about presentation to them, and maybe training also for them. Other remark is about functions for SD1, and they need in the navigation panel, when moving from one sub compartment to another, in forms 2 and 2a, to have text boxes for direct navigate for other sub compartment, because already made searching need two more clicks.

- SD 2 -

WEEKLY PROGRESS REPORT   No.9

For period from November 22nd to November 29th, 2013

Author: EDUSOFT, SIMT, TRINITY

Creation Date: November 29th, 2013

Seq. No.	Task Description	Assignee	Current % of progress	DATES			Tested Accepted by Purchaser User
				Planed Start	Planed End	Contracted/ Targeted	
4.2	**Improve MKFFIS User Interface**						
	Reform MKFFIS Left pane						
4.2.1	**a)** Remove Accordion menu, Navigation and Layers button from the left pane.	TRINITY	100%	02.10.2013	18.10.2013	10.10.2013	
	b) Add Tab control with five tabs.	TRINITY	100%	02.10.2013	18.10.2013	10.10.2013	
	c) Deploy Layers panel in the first tab named 'Layers'. This tab should be a default. (See Fig. 7)	TRINITY		02.10.2013	18.10.2013	10.10.2013	
	d) Deploy Map Selector in the second tab named 'Maps'. Show hierarchy of each map using a tree view control, except vegetation map. Show only the root node for vegetation map in the tree view. (See Fig.6) Because vegetation map has a lot of FMUs as its children, FMU selector should be accommodated in a separate tab (e). (See Fig. 8)	TRINITY	100%	02.10.2013	26.10.2013	10.10.2013	
	e) Deploy FMU selector in the third tab named 'FMU'. (See Fig. 8)	TRINITY	100%	02.10.2013	18.10.2013	10.10.2013	
	f) Deploy an accordion menu with two menu items in the fourth tab named 'Search'. Deploy Search Forest History panel in the first accordion menu item. (See Fig. 10)	TRINITY	80%	02.10.2013	01.12.2013	01.12.2013	
	g) Deploy AWS Overview panel in the fifth tab named 'AWS'. (See Fig. 9)	TRINITY	100%	02.10.2013	01.12.2013	01.12.2013	
	h) Tab names should be displayed in the language specified by the current language mode.	TRINITY	0%	02.10.2013	31.12.2013	31.12.2013	

	i) Layer settings in the Layers panel (Order of the layers, selected maps) and selected maps in the Map Selector and FMU selector shall be kept in a table with a relation to the user account, and when the user logs in again, the settings shall be restored.	TRINITY	100%	TBD	31.12.2013	31.12.2013	
4.2.2	**Add a link to user manual**		%				
	a) Add a link to end user manual of MKFFIS GIS to the tool bar.	JICA	0%	TBD	20.11.2013	20.11.2013	
	b) Add a link to end user manual of MKFFIS Fire Report to the top link.	JICA	0%	TBD	20.11.2013	20.11.2013	
	c) In English mode link to the user manual of English version, and In Macedonian mode link to the user manual of Macedonian version.	JICA	0%	TBD	20.11.2013	20.11.2013	
4.2.3	**Change background image seasonally**		%				
	a) Change background image on the login page seasonally. Image for each season will be provided by USER.	TRINITY	100%	TBD	20.11.2013	20.11.2013	
4.2.4	**Add a common calendar control**						
	a) Currently, vegetation dryness map (VDM) and FWI map have their own calendar control independently. And each hotspot (Seviri, Modis and Modis raw) has selections of 1 day ago, 2 days ago and 3 days ago.	TRINITY	100%	.04.10.2013	26.10.2013	15.10.2013	
	b) Remove the calendar control for VDM and FWI map.	TRINITY	100%	04.10.2013	26.10.2013	15.10.2013	
	c) Remove the hot spot selections: 1 day ago, 2 days ago and 3 days ago.	TRINITY	100%	04.10.2013	22.11.2013	15.10.2013	
	d) Rename hot spot selections: 'Seviri (Today)' as 'Seviri', 'Modis (Today)' as 'Modis'.	TRINITY	100%	04.10.2013	22.11.2013	15.10.2013	
	e) Add a calendar control with label 'Date' on the space where currently 'Navigation' is there. (See Fig. 7)	TRINITY	100%	TBD	26.10.2013	20.11.2013	
	f) Add a check box with label 'Now' next to the above calendar control. 'Now' shall be checked by default. *Labels should be in the language specified by current language mode.	TRINITY	100%	TBD	26.10.2013	20.11.2013	

	g) Modify code as follows: • When a past day is specified by the calendar control, clear 'Now' check box, and show VDM, FWI map hotspots and real-time disaster report (see 4.3.5.4) of the day specified. • When 'Now' check box is checked, show vegetation map, FWI map, hotspots and real-time disaster report of the current day, and keep updating these four real-time maps.	TRINITY	100%	04.10.2013	26.10.2013			15.10.20 13
4.2.5	**Display FWI Map of the previous day until today's FWI Map becomes available**							
	a) Currently, FWI Map is not shown until a day is specified by its calendar control.	TRINITY	100%	TBD	26.10.2013	20.11.2013		
	b) Modify code as follows: When 'Now' is checked (it is checked by default) FWI Map of now should be displayed. But FWI Map is created almost every day at 2pm. Therefore, it shall be displayed by the following rule. •If FWI Map of the current day exists now, display it. •Otherwise display FWI Map of one day before, if such exists. •Otherwise don't display FWI Map.	TRINITY	100%	TBD	26.10.2013	20.11.2013		
4.2.6	**Relocate vegetation map's attribute selector from Layers panel to the top of FMU selector**							
	a) Currently, attribute selectors of vegetation map are located in the Layers panel for each FMU (See Appendix A.4)	TRINITY	100%	TBD	20.11.2013	20.11.2013		
	b) Remove all the attribute selectors from the Layers panel.	TRINITY	100%	TBD	20.11.2013	20.11.2013		
	c) Add one attribute selector to the top line of FMU selector accommodated in the FMU Tab. (See Fig. 8)	TRINITY	100%	TBD	20.11.2013	20.11.2013		
	d) Modify code to apply the selected attribute to all the FMUs.	TRINITY	100%	TBD	20.11.2013	20.11.2013		

4.3	**Add New Layers / Improve Layers**						
	Improve Vegetation map Layer by including National Parks						
4.3.1	**a)** Shape files for three national parks will be provided from PURCHASER/USER. (*Related data set cleaning in progress by SIMT)	TRINITY	60%	TBD	29.11.2013	20.11.2013	
	b) Classification of species of National parks is not compatible to PEMF classification. So, Classification shall be converted to be compatible to PEMF's according to direction of PURCHASER/USER. (*Related classification of species in progress by SIMT)	TRINITY	60%	TBD	29.11.2013	20.11.2013	
	c) Add each National park FMU polygon as a member of PEMF FMU group.	TRINITY	60%	TBD	29.11.2013	20.11.2013	
4.3.2	**Improve Vegetation map Layer by including Protected area Zone 1**						
	a) Shape files for Protected area Zone 1 will be provided from PURCHASER/USER. They don't contain attributes.	TRINITY	100%	TBD	29.11.2013	30.11.2013	
	b) Add each Protected area Zone 1 polygon as a member of PEMF FMU group.	TRINITY	5%	TBD	29.11.2013	30.11.2013	
4.3.3	**Add a New Layer for MGRS Grid**						
	a) Add MGRS grid.	TRINITY	100%	TBD	30.11.2013	30.11.2013	
	b) Idea of implementation of MGRS grid can be obtained from http://dhost.info/usngweb/ (* definition of MGRS grid is different from definition of U.S. National Grid)	TRINITY	100%	TBD	30.11.2013	30.11.2013	
	c) Definition of MGRS Grid can be obtained from http://earth-info.nga.mil/GandG/coordsys/grids/mgrs.doc	TRINITY	100%	TBD	30.11.2013	30.11.2013	

	d) Suitable grids according to current zoom-in factor shall be selectable from Zone, 100km, 10km, 1km, 100m and 10m.	TRINITY	100%	TBD	30.11.2013	30.11.2013	
	Add a new Layer "Damage Forest Value Map"						
	a) Add a user privilege to enable/disable to access this map. When this layer is selected following functions shall be enabled.	TRINITY	100%	TBD	30.11.2013	30.11.2013	
	b) Allow users to draw a polygon	TRINITY	100%	TBD	30.11.2013	30.11.2013	
	c) Find intersections of the drawn polygon and subcompartments	TRINITY	100%	TBD	30.11.2013	30.11.2013	
4.3.4	**d)** As table form, the following data shall be shown for the intersected area: • CompartmentNo./SubCompartment No. • Intersected Area (ha) • Total Area of Subcompartment (ha) This value should be taken from Form9 of Inventory for corresponding subcompartment • % of intersected area over total area of subcompartment This value should be calculated by Intersected Area / total area of subcompartment x 100 • Value for the intersected area This value should be calculated as Value of Forest x % of intersected area where Value of Forest area shall be taken from corresponding field in Form 9 of Inventory • Total Value for the intersected areas	TRINITY	80%	TBD	30.11.2013	30.11.2013	
	e) Result intersection polygons shall be displayed in this layer with a color classification according to the total value for the intersected areas. User shall provide classification of colors by value.	TRINITY	0%	TBD	30.11.2013	30.11.2013	
4.3.5	**Add new layer group – CMC Operation Maps**						

4.3.5	**a)** Add a user privilege to enable/disable to access this Layer group.	TRINITY	100%	TBD	30.11.2013	30.11.2013	
	b) When this layer group is selected, user is allowed to draw a polygon which is used for inner polygon searches enabled by corresponding inner polygon search switches. (see Fig.6-A)	TRINITY	100%	TBD	30.11.2013	30.11.2013	
	c) State of inner polygon search switches shall be kept in a table with a relation to the user account, and when the user logs in again, the state shall be restored.	TRINITY	0%	TBD	30.11.2013	30.11.2013	
	d) The node of "CMC Operation Maps" shall be expanded by default.	TRINITY	100%	TBD	30.11.2013	30.11.2013	
4.3.5.1	**Add a "Resource Map" Layer**						
	a) Create and display resource icons corresponding to resource types at the coordinates specified in resource records from UNDP Database. (See Appendix B-1)	TRINITY	100%	TBD	30.11.2013	30.11.2013	
	b) This is not a permanent map. Successful PROPOSER shall write code to create and replace the map once a month.	TRINITY	90%	TBD	30.11.2013	30.11.2013	
	c) Add function for optional inner polygon search. Breakdown of resources in the drawn polygon shall be displayed as a table in the search result pane.	TRINITY	100%	TBD	30.11.2013	30.11.2013	
4.3.5.2	**Add a "Facility inventory Map" Layer**						
	a) Create and display facility inventory icons corresponding to facility types at the coordinates specified in facility inventory records from UNDP Database. (See Appendix B-1)	TRINITY	100%	TBD	30.11.2013	30.11.2013	
	b) This is not a permanent map. Successful PROPOSER shall write code to create and replace the map once a month.	TRINITY	90%	TBD	30.11.2013	30.11.2013	

	c) Add function for optional inner polygon search. Breakdown of facility inventory in the drawn polygon shall be displayed as a table in the search result pane.	TRINITY	100%	TBD	30.11.2013	30.11.2013	
4.3.5.3	**Add a "Demographic Map" Layer**						
	a) Show a thematic map showing total population by color classification using border of settlements.	TRINITY	0%	TBD	30.11.2013	30.11.2013	
	b) This is not a permanent map. Successful PROPOSER shall write code to create and replace the map once a month.	TRINITY	0%	TBD	30.11.2013	30.11.2013	
	c) Demographic information will be in a database to be created by UNDP which will become accessible from MKFFIS in mid July 2013. (see Appendix B-2)	TRINITY	0%	TBD	30.11.2013	30.11.2013	
	d) Add function for optional inner polygon search. Breakdown of total population of each settlement which is intersected by the drawn polygon shall be displayed in the search result pane.	TRINITY	0%	TBD	30.11.2013	30.11.2013	
4.3.5.4	**Real-time disaster report from RCMC**						
	a) Add a user privilege to enable/disable this function	TRINITY	100%	05.10.2013	30.11.2013	01.11.2013	
	b) Users having this privilege are able to send/edit/delete disaster report. Report consists of followings. • Geographic information (polygon, line, point, icon) drawn/dropped on the MKFFIS Map Pane • Text information (Details shall be decided by USER)	TRINITY	100%	05.10.2013	30.11.2013	01.11.2013	
	c) Disaster report sent shall be stored in Disaster Report Database. (Successful PROPOSER shall prepare this database).	TRINITY	100%	05.10.2013	01.11.2013	01.11.2013	
	d) The report sent, edited, deleted shall be reflected in real time to all the MKFFIS users who are online.	TRINITY	100%	05.10.2013	30.11.2013	01.11.2013	

	e) Geographic information sent shall be displayed as a Real-time disaster Map which is one member layer of the CMC Operation Maps. (see Fig.6-A)	TRINITY	100%	05.10.2013	30.11.2013	01.11.2013	
	f) Alarm message shall be displayed upon arrival of real-time disaster report. (In a message box for example)	TRINITY	100%	05.10.2013	30.11.2013	01.11.2013	
	g) Salvage as much data as possible from ESRI Application created on ArcSDE (see APPENDIX C). Source code is not available for ESRI Application, but user account of ArcSDE database (MSSQL) will be provided.	TRINITY	0%	TBD	01.11.2013	01.11.2013	
	h) If type of disaster is forest fire; create a new CMC Forest Fire Report. (Refer to 4.6.1)	TRINITY	0%	TBD	01.11.2013	01.11.2013	
4.3.5.5	**Search disaster reports**						
	a) Add a panel for this search in the second menu item of the accordion menu in Search tab. (see Fig. 10)	TRINITY	100%	TBD	30.11.2013	30.11.2013	
	b) Only the filter by CMC classification is required. PEMF classification is not necessary.	TRINITY	60%	TBD	30.11.2013	30.11.2013	
	c) Search disaster report panel has following controls: • From Date • To Date • GCUK unit selector • RCUK unit selector • Municipality and Settlement selector • Type of events • Search Report button • Clear Result button • Print Result button	TRINITY	60%	TBD	30.11.2013	30.11.2013	
	d) Search result shall be shown in the search result pane.	TRINITY	100%	TBD	30.11.2013	30.11.2013	

	e) Color of GCUK or RCUK polygons shall be classified by the number of disasters in the polygons in the specified period.	TRINITY	100%	TBD	30.11.2013	30.11.2013	
	f) Result Map shall be displayed as a 'Disaster search result' which is one member layer of the CMC Operation Maps. (see Fig.6-A)	TRINITY	100%	TBD	30.11.2013	30.11.2013	
	g) As for Print Result function, format of printed report shall be provided by USER.	TRINITY	0%	TBD	30.11.2013	30.11.2013	
4.4	**Add New Functions to MKFFIS**						
4.4.1	**Grid Information**						
	a) Show following information of a MGRS Grid clicked. • MGRS Grid code • Summary of resources in the grid (see Appendix B-1). Resources are in a database created by UNDP which is accessible from MKFFIS. • Summary of disaster events in the grid. Disaster events are in a database created by UNDP which is accessible from MKFFIS. • Summary of facility inventories in the grid. Inventories are in a database created by UNDP which is accessible from MKFFIS. • FWI at the center of the grid. FWI grid values are kept as GeoTIFF image. • ⬚ Vegetation dryness at the center of the grid. Vegetation dryness grid values are kept as GetTIFF image.	TRINITY	60%	TBD	30.12.2013	30.12.2013	
	Demographic information						
4.4.2	**a)** Show demographic information of an administrative area clicked (National, Municipalities, Settlements). When info button is clicked, show summary, and detail table representation to be shown below on the screen.	TRINITY	0%	TBD	30.11.2013	30.11.2013	

	b) Demographic information will be in a database to be created by UNDP which will become accessible from MKFFIS in mid July 2013.	TRINITY	0%	TBD	30.11.2013	30.11.2013
	c) Demographic information to be shown on the info button and detailed table will be decided by USER.	TRINITY	0%	TBD	30.11.2013	30.11.2013
4.4.3	**Add means to switch Between MKFFIS for internal purpose and MKFFIS for Public**					
	a) Currently, MKFFIS serves for internal purpose controlling available features by user account. But another instance of MKFFIS will be installed on the Internet Server to serve public users. MKFFIS for Public can be opened without login process, but much stronger restriction will be applied. Successful PROPOSER shall add means to switch from MKFFIS for internal purpose to MKFFIS for Public. Following procedure is an example of solution. • Define a special user GUEST. • Restriction to the public user will be applied by privilege settings of user GUEST. • Add necessary exceptions applicable to GUEST user. For example, user profile of GUEST user is not kept. • Prepare PUBLIC flag in a configuration file of MKFFIS GIS. • If the flag is OFF, MKFFIS starts normally from the login page. • VI. If the flag is ON, MKFFIS skips login page and starts from the main page, setting user name to GUEST automatically.	TRINITY	90%	TBD	30.11.2013	30.11.2013
	b) Link to MKFFIS for internal purpose shall be added to the MKFFIS for public.	TRINITY	90%	TBD	30.11.2013	30.11.2013
4.4.4	**Add function to fill section 5.1 in *P2* report taking meteorological data from AWS.**		100%	25.09.2013	09.10.2013	09.10.2013

	a) Add an AWS select box next to the 'Meteorological Station' text box. (See Fig..11) AWS Names in the select box shall be taken dynamically from the 'meteorologicalstations' table in the CUK database.	SIMT	100%	25.09.2013	09.10.2013	09.10.2013	
	b) Search the meteorological data of the selected AWS which is closest to the date/time specified in the '2.2 Detection' text box.	SIMT	100%	25.09.2013	09.10.2013	09.10.2013	
	c) If there is no data between 3 hours before and after the date/time specified by the '2.2 Detection' text box, show message 'No AWS data available' and do nothing to the textboxes, otherwise fill following textboxes in the section 5.1 of P2 report. • Meteorological Station: (name of meteorological station) • hour: (hour of the meteorological data measured) • Number of days from last raining: (to fill this box some calculation is necessary) • Maximum temperature: (fill maximum temperature of the specified day) • Relative humidity • Wind Speed • Direction (Wind direction)	SIMT	100%	25.09.2013	09.10.2013	09.10.2013	
	Changes requested from Operation department from CMC about forest fire report	SIMT	100%	03.10.2013	09.10.2013	09.10.2013	
4.5	**Add New Functions/Interface to GFIS**						
	Add a link to user manual						
4.5.1	**a)** Add a link to end user manual of GFIS GIS to the tool bar.	JICA					
	b) Add a link to end user manual of GFIS Planning to the top link.	JICA					
	c) Add a link to end user manual of GFIS Fire Report to the top link.	JICA					

	d) In English mode link to the user manual of English version, and In Macedonian mode link to the user manual of Macedonian version.	JICA					
4.5.2	**Limit available FMU by user privilege**						
	a) Add a function to the GFIS Admin page in order to specify FMUs under responsibility of each user.	TRINITY	0%	TBD	30.11.2013	30.11.2013	
	b) Limit FMUs to display and/or edit according to above privilege.	TRINITY	0%	TBD	30.11.2013	30.11.2013	
	c) Limit FMUs shown in the FMU Selector according to above privilege.	TRINITY	0%	TBD	30.11.2013	30.11.2013	
	d) Zoom in FMU under responsibility of the user when that user opens GFIS GIS.	TRINITY	0%	TBD	30.11.2013	30.11.2013	
4.5.3	**Allow access to past versions of forest plan.**						
	a) Currently, if a FMU polygon is edited and uploaded, old FMU polygons will be replaced by new FMU polygons. Therefore only the latest FMUs can be seen on GFIS GIS. Successful PROPOSER under the direction of PEMF shall add function to show FMUs in a past date specified by a calendar control. Following procedures are just an example of solution: • Add a calendar control to a suitable place on GFIS GIS. • Add attributes (effective from, expired on) to each FMU. • Preset some past date such as 1900.01.01 to 'effective from' and NULL to 'expired on'. • When a new FMU is uploaded, keep the old FMU and set its 'expired on' to the updated date. • Set the updated date to the new FMU's 'effective from' and set NULL to 'expired on'. • When a past date is specified, display FMUs according to their attribute 'effective from' and 'expired on'.	TRINITY	0%	TBD	30.11.2013	30.11.2013	
4.5.4	**Search FMU by year of expiry of special plan**		90%	15.11.2013	03.12.2013	03.12.2013	

	a) Each FMU has its planning effective for ten years. And the duration is kept in the forest planning database. Successful PROPOSER under the direction of PEMF shall add a function to search FMUs which special plans expire in the year specified.	SIMT	90%	15.11.2013	03.12.2013	03.12.2013	
4.5.5	**Change monthly input to daily for form 3, 3a and 5**		100%	15.10.2013	29.10.2013	29.10.2013	
	a) Currently, data entry to the form 3, 3a and 5 is carried out on a monthly basis. Successful PROPOSER under the direction of PEMF shall modify the code to cater to daily data entry. And add two options to the print function for these forms, one is daily summary, the other is monthly summary.	SIMT	100%	15.10.2013	29.10.2013	29.10.2013	
4.5.6	**Keep annual achievement for 10 years in Form 6**		100%	28.10.2013	06.11.2013	06.11.2013	
	a) Successful PROPOSER under the direction of PEMF shall modify code and design of Form 6 data entry sheet to keep annual achievement for 10 years for each sub compartment. Items to keep are as follows. • Area (ha) • Number of seedlings • Weight of seeds (kg)	SIMT	100%	28.10.2013	06.11.2013	06.11.2013	
4.5.7	**Keep annual achievement for 10 years in Form *8***		100%	01.11.2013	06.11.2013	06.11.2013	
	a) Successful PROPOSER under the direction of PEMF shall modify code and design of Form 8 data entry sheet to keep annual achievement for 10 years for each sub compartment. Items to keep are as follows. • Length of roads (km) • Cleared wood (m3)	SIMT	100%	01.11.2013	06.11.2013	06.11.2013	
4.5.8	**Fill area in Form 1 taken from polygon attribute**		100%	10.11.2013	25.11.2013	25.12.2013	
	a) Successful PROPOSER under the direction of PEMF shall modify code of Form 1 data entry sheet to fill area automatically taken from the attribute of polygon corresponding to selected sub compartment.	SIMT	100%	10.11.2013	25.11.2013	25.12.2013	

WEEKLY PROGRESS REPORT for the period from November 22nd to November 29th 2013

	Add National and Regional office level summaries to the reports in Reports/Rekapitulari menu.		100%	03.10.2013	20.10.2013	20.10.2013	
4.5.9	**a)** Currently, reports under the Reports/Rekapitulari menu are summary of selected FMU. Successful PROPOSER under the direction of PEMF shall add summary of National level and Regional Office level, and add links to corresponding summaries in the menu.	SIMT	100%	03.10.2013	20.10.2013	20.10.2013	
	b) FMUs shall be classified by regional office in order to create regional office summary.	SIMT	100%	03.10.2013	20.10.2013	20.10.2013	
4.5.1 0*	**NEW REQUEST - Add middle aged forest in PEMF**	SIMT	0%	01.12.2013	TBD	TBD	
	a) **Add in the input form selection for middle aged forest in form 2a**	SIMT	0%	01.12.2013	10.12.2013	10.12.2013	
	b) **Add group section in the reports for forest**	SIMT	0%	TBD	TBD	TBD	
6.	**Improvement related to MKFFIS & GFIS modules**						
4.6.1	Modify PEMF Fire Report input module to report by fire.	SIMT	90%	06.11.2013	03.12.2013	03.12.2013	

WEEKLY PROGRESS REPORT for the period from November 22nd to November 29th 2013

a) Currently fire report is created in PEMF by each sub compartment even in case of one big fire over several compartments. On the other hand, in the CMC fire report (P2 report) is fire based, not sub compartment based. Therefore, a fire report divided into several reports by sub compartment must be merged at CMC to create P2 report for one fire. There are some complaints in PEMF for this process. • PEMF does not want redundant data entry. For example, some common fields such as start of fire and end of fire should be entered repeatedly for each related sub compartment. • PEMF has authority to identify a fire over several sub compartments, therefore merging reports by sub compartment into one fire report should be conducted by PEMF. • Fire report from PEMF does not have to be by sub compartment. Report by fire is acceptable.	SIMT	90%	06.11.2013	03.12.2013	03.12.2013	
b) Because P2 report module has a function to manage a report containing information of multiple sub compartments, applying the same approach to the PEMF fire report will be an elegant solution.	SIMT	90%	06.11.2013	03.12.2013	03.12.2013	

	c) Successful PROPOSER under direction of USER shall conduct following modification. • Modify current PEMF fire report module on GFIS Fire Report so that it can report by fire by adding functionality to manage information from multiple sub compartments. • Remove MERGE PEMF REPORT function from P2 report module in MKFFIS Fire Report. • Add IMPORT PEMF REPORT function to MKFFIS Fire Report • Adjust P2 Report module on MKFFIS Fire Report to be able to show correctly the Fire report which was imported from PEMF REPORT • Rename P2 Report as CMC Forest Fire Report. • Add 'read-only' user privilege to GFIS Fire Report and MKFFIS Fire Report which allows MKFFIS user to browse PEMF fire report, and allows GFIS user to browse CMC Fire Report. • Printing format of PEMF Fire Report to obtain approval of SiFH shall not be changed.	SIMT	90%	06.11.2013	03.12.2013	03.12.2013	
7.	**Performance Tuning**						
	Performance tuning of MKFFIS		10%				
4.7.1	**a)** Currently, there are following complaints about speed. • MKFFIS GIS takes very long time to show the login page, if it is accessed over a long distance. For example, accessing from Japan, it takes 90 seconds to open the login page and another 90 • Speed to show FMUs is slow, and from time to time it fails to show them.	TRINITY	30%	02.10.2013	25.10.2013	25.10.2013	
	b) MKFFIS GIS shall be optimized by execution speed.	TRINITY	30%	02.10.2013	25.10.2013	25.10.2013	

	c) Optimization is not limited to source code level. All the possible factors shall be taken into account. For example, server configuration, deployment of files, network structure, use of external servers (Google server for jQuery), indexing of tables in databases, etc.	TRINITY	10%	02.10.2013	25.10.2013	25.10.2013	
	d) Improvement of performance should be shown quantitatively.	TRINITY	15%	02.10.2013	25.10.2013	25.10.2013	
4.7.2	**Performance tuning of GFIS**						
	a) Currently, there are following complaints about speed which are similar to MKFFIS GIS. • GFIS GIS takes very long time to show the login page, if it is accessed over a long distance. • Speed to show FMUs is slow, and from time to time it fails to show them.	TRINITY	0%	25.10.2013	05.11.2013	05.11.2013	
	b) GFIS GIS shall be optimized by execution speed	TRINITY	0%	25.10.2013	05.11.2013	05.11.2013	
	c) Optimization is not limited to source code level. All the possible factors shall be taken into account. For example, server configuration, deployment of files, network structure, use of external servers (Google server for jQuery), indexing of tables in databases, etc.	TRINITY	0%	25.10.2013	05.11.2013	05.11.2013	
	d) Improvement of performance should be shown quantitatively.	TRINITY	0%	25.10.2013	05.11.2013	05.11.2013	
8.	**Installation/QA/Training/Documentation**						
4.8.1	MKFFIS and GIS Installation, Quality Assurance, Training, Documentation						
4.8.2	GFIS and GIS Installation, Quality Assurance, Training, Documentation						

4.4 Add New Functions to MKFFIS

4.4.1 We have started to work on the MGRS GRID. The idea is taken from the script that Mr. Kozu created. The lines are drawn from code, but when a user select a particular section of the grid a polygon is created on top of the grid containing the bounds of the quadrant. This is needed for getting the information via the intersection function provided by Openlayers. We are confident that the GRID will be done by 31.11.2013

4.4.4 Add function to fill section 5.1 in P2 report taking meteorological data from AWS. SIMT
Target: MKFFIS Fire Report
Waiting for test on side be CMC/JICA and approval.
Demo is on test side.

4.5 Add New Functions/Interface to GFIS

4.5.4 Search FMU by year of expiry of special plan SIMT
Target: GFIS Planning
Translation to English need to be done.
Demo is on test side.

4.5.5 Change monthly input to daily for form 3, 3a and 5 SIMT
Target: GFIS Planning
Waiting for test on side be PEMF/CMC/JICA and approval.
Demo is on test side.

4.5.6 Keep annual achievement for 10 years in Form 6 SIMT
Waiting for test on side be PEMF/CMC/JICA and approval.
Demo is on test side.
Target: GFIS Planning

4.5.7 Keep annual achievement for 10 years in Form 8 SIMT
Waiting for test on side be PEMF/CMC/JICA and approval.
Demo is on test side.
Target: GFIS Planning

4.5.8 Fill area in Form 1 taken from polygon attribute SIMT
Waiting for test on side be PEMF/CMC/JICA and approval.
Demo is on test side.
Target: GFIS Planning

4.5.9 Add National and Regional office level summaries to the reports in Reports/Rekapitulari menu. SIMT
Target: GFIS Planning
Waiting for test on side be PEMF/CMC/JICA and approval.
Demo is on test side.

4.6 Improvement related to both MKFFIS and GFIS modules

4.6.1 Modify PEMF Fire Report input module to report by fire. SIMT
Internal testing and translation to English need to be finished. Complete developing is done.
Demo is on test side.

4.7.1 Trinity extensively works on finding ways of fixing the performance issues. Unnecessary scripts are being deleted, performance tuning on the loading of the layers is done, external loading of the scripts is done etc.

4.4.1 We have some questions about this issue, our plan is to discuss them on Monday- TRINITY
4.3.5 c. We think that this is not necessary; our proposal is to remove this point- TRINITY

SD 2

WEEKLY PROGRESS REPORT   no.10
For period from November 29th to December 6th, 2013

Author: EDUSOFT, SIMT, TRINITY

Creation Date: December 6th, 2013

Seq. No.	Task Description	Assignee	Current % of progress	DATES			
				Planed Start	Planed End	Contracted/ Targeted	Tested Accepted by Developer
4.2	**Improve MKFFIS User Interface**						
	Reform MKFFIS Left pane						
4.2.1	**a)** Remove Accordion menu, Navigation and Layers button from the left pane.	TRINITY	100%	02.10.2013	18.10.2013	10.10.2013	
	b) Add Tab control with five tabs.	TRINITY	100%	02.10.2013	18.10.2013	10.10.2013	
	c) Deploy Layers panel in the first tab named 'Layers'. This tab should be a default. (See Fig. 7)	TRINITY		02.10.2013	18.10.2013	10.10.2013	
	d) Deploy Map Selector in the second tab named 'Maps'. Show hierarchy of each map using a tree view control, except vegetation map. Show only the root node for vegetation map in the tree view. (See Fig.6) Because vegetation map has a lot of FMUs as its children, FMU selector should be accommodated in a separate tab (e). (See Fig. 8)	TRINITY	100%	02.10.2013	26.10.2013	10.10.2013	
	e) Deploy FMU selector in the third tab named 'FMU'. (See Fig. 8)	TRINITY	100%	02.10.2013	18.10.2013	10.10.2013	
	f) Deploy an accordion menu with two menu items in the fourth tab named 'Search'. Deploy Search Forest History panel in the first accordion menu item. (See Fig. 10)	TRINITY	100%	02.10.2013	01.12.2013	01.12.2013	
	g) Deploy AWS Overview panel in the fifth tab named 'AWS'. (See Fig. 9)	TRINITY	100%	02.10.2013	01.12.2013	01.12.2013	
	h) Tab names should be displayed in the language specified by the current language mode.	TRINITY	0%	02.10.2013	31.12.2013	31.12.2013	

	i) Layer settings in the Layers panel (Order of the layers, selected maps) and selected maps in the Map Selector and FMU selector shall be kept in a table with a relation to the user account, and when the user logs in again, the settings shall be restored.	TRINITY	100%	TBD	31.12.2013	31.12.2013	
4.2.2	**Add a link to user manual**		%				
	a) Add a link to end user manual of MKFFIS GIS to the tool bar.	JICA	0%	TBD	20.11.2013	20.11.2013	
	b) Add a link to end user manual of MKFFIS Fire Report to the top link.	JICA	0%	TBD	20.11.2013	20.11.2013	
	c) In English mode link to the user manual of English version, and In Macedonian mode link to the user manual of Macedonian version.	JICA	0%	TBD	20.11.2013	20.11.2013	
4.2.3	**Change background image seasonally**		%				
	a) Change background image on the login page seasonally. Image for each season will be provided by USER.	TRINITY	100%	TBD	20.11.2013	20.11.2013	
4.2.4	**Add a common calendar control**						
	a) Currently, vegetation dryness map (VDM) and FWI map have their own calendar control independently. And each hotspot (Seviri, Modis and Modis raw) has selections of 1 day ago, 2 days ago and 3 days ago.	TRINITY	100%	.04.10.2013	26.10.2013	15.10.2013	
	b) Remove the calendar control for VDM and FWI map.	TRINITY	100%	04.10.2013	26.10.2013	15.10.2013	
	c) Remove the hot spot selections: 1 day ago, 2 days ago and 3 days ago.	TRINITY	100%	04.10.2013	22.11.2013	15.10.2013	
	d) Rename hot spot selections: 'Seviri (Today)' as 'Seviri', 'Modis (Today)' as 'Modis'.	TRINITY	100%	04.10.2013	22.11.2013	15.10.2013	
	e) Add a calendar control with label 'Date' on the space where currently 'Navigation' is there. (See Fig. 7)	TRINITY	100%	TBD	26.10.2013	20.11.2013	
	f) Add a check box with label 'Now' next to the above calendar control. 'Now' shall be checked by default. *Labels should be in the language specified by current language mode.	TRINITY	100%	TBD	26.10.2013	20.11.2013	

	g) Modify code as follows: • When a past day is specified by the calendar control, clear 'Now' check box, and show VDM, FWI map hotspots and real-time disaster report (see 4.3.5.4) of the day specified. • When 'Now' check box is checked, show vegetation map, FWI map, hotspots and real-time disaster report of the current day, and keep updating these four real-time maps.	TRINITY	100%	04.10.2013	26.10.2013			15.10.20 13
4.2.5	**Display FWI Map of the previous day until today's FWI Map becomes available**							
	a) Currently, FWI Map is not shown until a day is specified by its calendar control.	TRINITY	100%	TBD	26.10.2013	20.11.2013		
	b) Modify code as follows: When 'Now' is checked (it is checked by default) FWI Map of now should be displayed. But FWI Map is created almost every day at 2pm. Therefore, it shall be displayed by the following rule. •If FWI Map of the current day exists now, display it. •Otherwise display FWI Map of one day before, if such exists. •Otherwise don't display FWI Map.	TRINITY	100%	TBD	26.10.2013	20.11.2013		
4.2.6	**Relocate vegetation map's attribute selector from Layers panel to the top of FMU selector**							
	a) Currently, attribute selectors of vegetation map are located in the Layers panel for each FMU (See Appendix A.4)	TRINITY	100%	TBD	20.11.2013	20.11.2013		
	b) Remove all the attribute selectors from the Layers panel.	TRINITY	100%	TBD	20.11.2013	20.11.2013		
	c) Add one attribute selector to the top line of FMU selector accommodated in the FMU Tab. (See Fig. 8)	TRINITY	100%	TBD	20.11.2013	20.11.2013		
	d) Modify code to apply the selected attribute to all the FMUs.	TRINITY	100%	TBD	20.11.2013	20.11.2013		

4.3	**Add New Layers / Improve Layers**						
	Improve Vegetation map Layer by including National Parks						
4.3.1	**a)** Shape files for three national parks will be provided from DEVELOPER. (*Related data set cleaning in progress by SIMT)	TRINITY	100%	TBD	01.12.2013	20.11.2013	
	b) Classification of species of National parks is not compatible to PEMF classification. So, Classification shall be converted to be compatible to PEMF's according to direction of DEVELOPER. (*Related classification of species in progress by SIMT)	TRINITY	100%	TBD	01.12.2013	20.11.2013	
	c) Add each National park FMU polygon as a member of PEMF FMU group.	TRINITY	100%	TBD	01.12.2013	20.11.2013	
4.3.2	**Improve Vegetation map Layer by including Protected area Zone 1**						
	a) Shape files for Protected area Zone 1 will be provided from DEVELOPER. They don't contain attributes.	TRINITY	100%	TBD	29.11.2013	30.11.2013	
	b) Add each Protected area Zone 1 polygon as a member of PEMF FMU group.	TRINITY	100%	TBD	01.12.2013	30.11.2013	
4.3.3	**Add a New Layer for MGRS Grid**						
	a) Add MGRS grid.	TRINITY	100%	TBD	30.11.2013	30.11.2013	
	b) Idea of implementation of MGRS grid can be obtained from http://dhost.info/usngweb/ (* definition of MGRS grid is different from definition of U.S. National Grid)	TRINITY	100%	TBD	30.11.2013	30.11.2013	
	c) Definition of MGRS Grid can be obtained from http://earth-info.nga.mil/GandG/coordsys/grids/mgrs.doc	TRINITY	100%	TBD	30.11.2013	30.11.2013	

	d) Suitable grids according to current zoom-in factor shall be selectable from Zone, 100km, 10km, 1km, 100m and 10m.	TRINITY	100%	TBD	30.11.2013	30.11.2013
	Add a new Layer "Damage Forest Value Map"					
	a) Add a user privilege to enable/disable to access this map. When this layer is selected following functions shall be enabled.	TRINITY	100%	TBD	30.11.2013	30.11.2013
	b) Allow users to draw a polygon	TRINITY	100%	TBD	30.11.2013	30.11.2013
	c) Find intersections of the drawn polygon and subcompartments	TRINITY	100%	TBD	30.11.2013	30.11.2013
4.3.4	**d)** As table form, the following data shall be shown for the intersected area: • CompartmentNo./SubCompartment No. • Intersected Area (ha) • Total Area of Subcompartment (ha) This value should be taken from Form9 of Inventory for corresponding subcompartment • % of intersected area over total area of subcompartment This value should be calculated by Intersected Area / total area of subcompartment x 100 • Value for the intersected area This value should be calculated as Value of Forest x % of intersected area where Value of Forest area shall be taken from corresponding field in Form 9 of Inventory • Total Value for the intersected areas	TRINITY	80%	TBD	01.12.2013	30.11.2013
	~~**e)** Result intersection polygons shall be displayed in this layer with a color classification according to the total value for the intersected areas. User shall provide classification of colors by value.~~ Abandoned as per Purchaser/User instruction	TRINITY	0%	TBD	30.11.2013	30.11.2013
4.3.5	**Add new layer group – CMC Operation Maps**					

4.3.5	**a)** Add a user privilege to enable/disable to access this Layer group.	TRINITY	100%	TBD	30.11.2013	30.11.2013	
	b) When this layer group is selected, user is allowed to draw a polygon which is used for inner polygon searches enabled by corresponding inner polygon search switches. (see Fig.6-A)	TRINITY	100%	TBD	30.11.2013	30.11.2013	
	~~**c)** State of inner polygon search switches shall be kept in a table with a relation to the user account, and when the user logs in again, the state shall be restored.~~ Abandoned as per Purchaser/User instruction	TRINITY	0%	TBD	30.11.2013	30.11.2013	
	d) The node of "CMC Operation Maps" shall be expanded by default.	TRINITY	100%	TBD	30.11.2013	30.11.2013	
4.3.5.1	**Add a "Resource Map" Layer**						
	a) Create and display resource icons corresponding to resource types at the coordinates specified in resource records from UNDP Database. (See Appendix B-1)	TRINITY	100%	TBD	30.11.2013	30.11.2013	
	b) This is not a permanent map. DEVELOPER shall write code to create and replace the map once a month.	TRINITY	90%	TBD	30.11.2013	30.11.2013	
	c) Add function for optional inner polygon search. Breakdown of resources in the drawn polygon shall be displayed as a table in the search result pane.	TRINITY	100%	TBD	30.11.2013	30.11.2013	
4.3.5.2	**Add a "Facility inventory Map" Layer**						
	a) Create and display facility inventory icons corresponding to facility types at the coordinates specified in facility inventory records from UNDP Database. (See Appendix B-1)	TRINITY	100%	TBD	30.11.2013	30.11.2013	
	b) This is not a permanent map. DEVELOPER shall write code to create and replace the map once a month.	TRINITY	90%	TBD	30.11.2013	30.11.2013	

	c) Add function for optional inner polygon search. Breakdown of facility inventory in the drawn polygon shall be displayed as a table in the search result pane.	TRINITY	100%	TBD	30.11.2013	30.11.2013	
4.3.5.3	**Add a "Demographic Map" Layer**						
	a) Show a thematic map showing total population by color classification using border of settlements.	TRINITY	0%	TBD	06.12.2013	30.11.2013	
	b) This is not a permanent map. DEVELOPER shall write code to create and replace the map once a month.	TRINITY	0%	TBD	06.12.2013	30.11.2013	
	c) Demographic information will be in a database to be created by UNDP which will become accessible from MKFFIS in mid July 2013. (see Appendix B-2)	TRINITY	0%	TBD	06.12.2013	30.11.2013	
	d) ~~Add function for optional inner polygon search. Breakdown of total population of each settlement which is intersected by the drawn polygon shall be displayed in the search result pane.~~ Abandoned as per Purchaser/User instruction	TRINITY	0%	TBD	06.12.2013	30.11.2013	
4.3.5.4	**Real-time disaster report from RCMC**						
	a) Add a user privilege to enable/disable this function	TRINITY	100%	05.10.2013	30.11.2013	01.11.2013	
	b) Users having this privilege are able to send/edit/delete disaster report. Report consists of followings. • Geographic information (polygon, line, point, icon) drawn/dropped on the MKFFIS Map Pane • Text information (Details shall be decided by USER)	TRINITY	100%	05.10.2013	30.11.2013	01.11.2013	
	c) Disaster report sent shall be stored in Disaster Report Database. (DEVELOPER shall prepare this database).	TRINITY	100%	05.10.2013	01.11.2013	01.11.2013	
	d) The report sent, edited, deleted shall be reflected in real time to all the MKFFIS users who are online.	TRINITY	100%	05.10.2013	30.11.2013	01.11.2013	

	e) Geographic information sent shall be displayed as a Real-time disaster Map which is one member layer of the CMC Operation Maps. (see Fig.6-A)	TRINITY	100%	05.10.2013	30.11.2013	01.11.2013	
	f) Alarm message shall be displayed upon arrival of real-time disaster report. (In a message box for example)	TRINITY	100%	05.10.2013	30.11.2013	01.11.2013	
	~~**g)** Salvage as much data as possible from ESRI Application created on ArcSDE (see APPENDIX C). Source code is not available for ESRI Application, but user account of ArcSDE database (MSSQL) will be provided.~~ Abandoned as per Purchaser/User instruction	TRINITY	0%	TBD	01.11.2013	01.11.2013	
	~~**h)** If type of disaster is forest fire; create a new CMC Forest Fire Report. (Refer to 4.6.1)~~ Abandoned as per Purchaser/User instruction	TRINITY	0%	TBD	01.11.2013	01.11.2013	
4.3.5.5	**Search disaster reports**						
	a) Add a panel for this search in the second menu item of the accordion menu in Search tab. (see Fig. 10)	TRINITY	100%	TBD	30.11.2013	30.11.2013	
	b) Only the filter by CMC classification is required. PEMF classification is not necessary.	TRINITY	100%	TBD	01.12.2013	30.11.2013	
	c) Search disaster report panel has following controls: • From Date • To Date • GCUK unit selector • RCUK unit selector • Municipality and Settlement selector • Type of events • Search Report button • Clear Result button • Print Result button	TRINITY	60%	TBD	01.12.2013	30.11.2013	
	d) Search result shall be shown in the search result pane.	TRINITY	100%	TBD	30.11.2013	30.11.2013	

		e) Color of GCUK or RCUK polygons shall be classified by the number of disasters in the polygons in the specified period.	TRINITY	100%	TBD	30.11.2013	30.11.2013	
		f) Result Map shall be displayed as a 'Disaster search result' which is one member layer of the CMC Operation Maps. (see Fig.6-A)	TRINITY	100%	TBD	30.11.2013	30.11.2013	
		g) As for Print Result function, format of printed report shall be provided by USER.	TRINITY	0%	TBD	30.11.2013	30.11.2013	
4.4	**Add New Functions to MKFFIS**							
4.4.1	**Grid Information**							
		a) Show following information of a MGRS Grid clicked. • MGRS Grid code • Summary of resources in the grid (see Appendix B-1). Resources are in a database created by UNDP which is accessible from MKFFIS. • Summary of disaster events in the grid. Disaster events are in a database created by UNDP which is accessible from MKFFIS. • Summary of facility inventories in the grid. Inventories are in a database created by UNDP which is accessible from MKFFIS. • FWI at the center of the grid. FWI grid values are kept as GeoTIFF image. • ⬚ Vegetation dryness at the center of the grid. Vegetation dryness grid values are kept as GetTIFF image.	TRINITY	60%	TBD	30.12.2013	30.12.2013	
	Demographic information							
4.4.2		a) Show demographic information of an administrative area clicked (National, Municipalities, Settlements). When info button is clicked, show summary, and detail table representation to be shown below on the screen.	TRINITY	0%	TBD	06.12.2013	30.11.2013	

	b) Demographic information will be in a database to be created by UNDP which will become accessible from MKFFIS in mid July 2013.	TRINITY	0%	TBD	06.12.2013	30.11.2013	
	c) Demographic information to be shown on the info button and detailed table will be decided by USER.	TRINITY	0%	TBD	06.12.2013	30.11.2013	
	Add means to switch Between MKFFIS for internal purpose and MKFFIS for Public						
4.4.3	**a)** Currently, MKFFIS serves for internal purpose controlling available features by user account. But another instance of MKFFIS will be installed on the Internet Server to serve public users. MKFFIS for Public can be opened without login process, but much stronger restriction will be applied. DEVELOPER shall add means to switch from MKFFIS for internal purpose to MKFFIS for Public. Following procedure is an example of solution. • Define a special user GUEST. • Restriction to the public user will be applied by privilege settings of user GUEST. • Add necessary exceptions applicable to GUEST user. For example, user profile of GUEST user is not kept. • Prepare PUBLIC flag in a configuration file of MKFFIS GIS. • If the flag is OFF, MKFFIS starts normally from the login page. • VI. If the flag is ON, MKFFIS skips login page and starts from the main page, setting user name to GUEST automatically.	TRINITY	90%	TBD	30.11.2013	30.11.2013	
	b) Link to MKFFIS for internal purpose shall be added to the MKFFIS for public.	TRINITY	90%	TBD	30.11.2013	30.11.2013	
4.4.4	**Add function to fill section 5.1 in _P2_ report taking meteorological data from AWS.**		100%	25.09.2013	09.10.2013	09.10.2013	

	a) Add an AWS select box next to the 'Meteorological Station' text box. (See Fig..11) AWS Names in the select box shall be taken dynamically from the 'meteorologicalstations' table in the CUK database.	SIMT	100%	25.09.2013	09.10.2013	09.10.2013	
	b) Search the meteorological data of the selected AWS which is closest to the date/time specified in the '2.2 Detection' text box.	SIMT	100%	25.09.2013	09.10.2013	09.10.2013	
	c) If there is no data between 3 hours before and after the date/time specified by the '2.2 Detection' text box, show message 'No AWS data available' and do nothing to the textboxes, otherwise fill following textboxes in the section 5.1 of P2 report. • Meteorological Station: (name of meteorological station) • hour: (hour of the meteorological data measured) • Number of days from last raining: (to fill this box some calculation is necessary) • Maximum temperature: (fill maximum temperature of the specified day) • Relative humidity • Wind Speed • Direction (Wind direction)	SIMT	100%	25.09.2013	09.10.2013	09.10.2013	
	Changes requested from Operation department from CMC about forest fire report	SIMT	100%	03.10.2013	09.10.2013	09.10.2013	
4.5	**Add New Functions/Interface to GFIS**						
	Add a link to user manual						
4.5.1	**a)** Add a link to end user manual of GFIS GIS to the tool bar.	JICA					
	b) Add a link to end user manual of GFIS Planning to the top link.	JICA					
	c) Add a link to end user manual of GFIS Fire Report to the top link.	JICA					

	d) In English mode link to the user manual of English version, and In Macedonian mode link to the user manual of Macedonian version.	JICA					
4.5.2	**Limit available FMU by user privilege**						
	a) Add a function to the GFIS Admin page in order to specify FMUs under responsibility of each user.	TRINITY	0%	TBD	06.12.2013	30.11.2013	
	b) Limit FMUs to display and/or edit according to above privilege.	TRINITY	0%	TBD	06.12.2013	30.11.2013	
	c) Limit FMUs shown in the FMU Selector according to above privilege.	TRINITY	0%	TBD	06.12.2013	30.11.2013	
	d) Zoom in FMU under responsibility of the user when that user opens GFIS GIS.	TRINITY	0%	TBD	06.12.2013	30.11.2013	
4.5.3	**Allow access to past versions of forest plan.**						
	a) Currently, if a FMU polygon is edited and uploaded, old FMU polygons will be replaced by new FMU polygons. Therefore only the latest FMUs can be seen on GFIS GIS. DEVELOPER under the direction of PEMF shall add function to show FMUs in a past date specified by a calendar control. Following procedures are just an example of solution: • Add a calendar control to a suitable place on GFIS GIS. • Add attributes (effective from, expired on) to each FMU. • Preset some past date such as 1900.01.01 to 'effective from' and NULL to 'expired on'. • When a new FMU is uploaded, keep the old FMU and set its 'expired on' to the updated date. • Set the updated date to the new FMU's 'effective from' and set NULL to 'expired on'. • When a past date is specified, display FMUs according to their attribute 'effective from' and 'expired on'.	TRINITY	0%	TBD	06.12.2013	30.11.2013	
4.5.4	**Search FMU by year of expiry of special plan**		90%	15.11.2013	01.12.2013	01.12.2013	

	a) Each FMU has its planning effective for ten years. And the duration is kept in the forest planning database. DEVELOPER under the direction of PEMF shall add a function to search FMUs which special plans expire in the year specified.	SIMT	90%	15.11.2013	01.12.2013	01.12.2013	
4.5.5	**Change monthly input to daily for form 3, 3a and 5**		100%	15.10.2013	29.10.2013	29.10.2013	
	a) Currently, data entry to the form 3, 3a and 5 is carried out on a monthly basis. DEVELOPER under the direction of PEMF shall modify the code to cater to daily data entry. And add two options to the print function for these forms, one is daily summary, the other is monthly summary.	SIMT	100%	15.10.2013	29.10.2013	29.10.2013	
4.5.6	**Keep annual achievement for 10 years in Form 6**		100%	28.10.2013	06.11.2013	06.11.2013	
	a) DEVELOPER under the direction of PEMF shall modify code and design of Form 6 data entry sheet to keep annual achievement for 10 years for each sub compartment. Items to keep are as follows. • Area (ha) • Number of seedlings • Weight of seeds (kg)	SIMT	100%	28.10.2013	06.11.2013	06.11.2013	
4.5.7	**Keep annual achievement for 10 years in Form *8***		100%	01.11.2013	06.11.2013	06.11.2013	
	a) DEVELOPER under the direction of PEMF shall modify code and design of Form 8 data entry sheet to keep annual achievement for 10 years for each sub compartment. Items to keep are as follows. • Length of roads (km) • Cleared wood (m3)	SIMT	100%	01.11.2013	06.11.2013	06.11.2013	
4.5.8	**Fill area in Form 1 taken from polygon attribute**		100%	10.11.2013	25.11.2013	25.12.2013	
	a) DEVELOPER under the direction of PEMF shall modify code of Form 1 data entry sheet to fill area automatically taken from the attribute of polygon corresponding to selected sub compartment.	SIMT	100%	10.11.2013	25.11.2013	25.12.2013	

	Add National and Regional office level summaries to the reports in Reports/Rekapitulari menu.		100%	03.10.2013	20.10.2013	20.10.2013	
4.5.9	**a)** Currently, reports under the Reports/Rekapitulari menu are summary of selected FMU. DEVELOPER under the direction of PEMF shall add summary of National level and Regional Office level, and add links to corresponding summaries in the menu.	SIMT	100%	03.10.2013	20.10.2013	20.10.2013	
	b) FMUs shall be classified by regional office in order to create regional office summary.	SIMT	100%	03.10.2013	20.10.2013	20.10.2013	
4.5.10*	**NEW REQUEST - Add middle aged forest in PEMF**	SIMT	100%	01.12.2013	TBD	TBD	
	a) **Add in the input form selection for middle aged forest in form 2a**	SIMT	100%	01.12.2013	10.12.2013	10.12.2013	
	b) **Add group section in the reports for forest**	SIMT	50%	TBD	TBD	TBD	
6.	**Improvement related to MKFFIS & GFIS modules**						
4.6.1	Modify PEMF Fire Report input module to report by fire.	SIMT	100%	06.11.2013	01.12.2013	01.12.2013	

a) Currently fire report is created in PEMF by each sub compartment even in case of one big fire over several compartments. On the other hand, in the CMC fire report (P2 report) is fire based, not sub compartment based. Therefore, a fire report divided into several reports by sub compartment must be merged at CMC to create P2 report for one fire. There are some complaints in PEMF for this process. • PEMF does not want redundant data entry. For example, some common fields such as start of fire and end of fire should be entered repeatedly for each related sub compartment. • PEMF has authority to identify a fire over several sub compartments, therefore merging reports by sub compartment into one fire report should be conducted by PEMF. • Fire report from PEMF does not have to be by sub compartment. Report by fire is acceptable.	SIMT	100%	06.11.2013	01.12.2013	01.12.2013	
b) Because P2 report module has a function to manage a report containing information of multiple sub compartments, applying the same approach to the PEMF fire report will be an elegant solution.	SIMT	100%	06.11.2013	01.12.2013	01.12.2013	

	c) DEVELOPER under direction of USER shall conduct following modification.	SIMT	100%	06.11.2013	01.12.2013	01.12.2013	
	• Modify current PEMF fire report module on GFIS Fire Report so that it can report by fire by adding functionality to manage information from multiple sub compartments.						
	• Remove MERGE PEMF REPORT function from P2 report module in MKFFIS Fire Report.						
	• Add IMPORT PEMF REPORT function to MKFFIS Fire Report						
	• Adjust P2 Report module on MKFFIS Fire Report to be able to show correctly the Fire report which was imported from PEMF REPORT						
	• Rename P2 Report as CMC Forest Fire Report.						
	• Add 'read-only' user privilege to GFIS Fire Report and MKFFIS Fire Report which allows MKFFIS user to browse PEMF fire report, and allows GFIS user to browse CMC Fire Report.						
	• Printing format of PEMF Fire Report to obtain approval of SiFH shall not be changed.						
7.	**Performance Tuning**						
	Performance tuning of MKFFIS		10%				
4.7.1	**a)** Currently, there are following complaints about speed. • MKFFIS GIS takes very long time to show the login page, if it is accessed over a long distance. For example, accessing from Japan, it takes 90 seconds to open the login page and another 90 • Speed to show FMUs is slow, and from time to time it fails to show them.	TRINITY	30%	02.10.2013	25.10.2013	25.10.2013	
	b) MKFFIS GIS shall be optimized by execution speed.	TRINITY	30%	02.10.2013	25.10.2013	25.10.2013	

	c) Optimization is not limited to source code level. All the possible factors shall be taken into account. For example, server configuration, deployment of files, network structure, use of external servers (Google server for jQuery), indexing of tables in databases, etc.	TRINITY	10%	02.10.2013	25.10.2013	25.10.2013	
	d) Improvement of performance should be shown quantitatively.	TRINITY	15%	02.10.2013	25.10.2013	25.10.2013	
	Performance tuning of GFIS						
4.7.2	**a)** Currently, there are following complaints about speed which are similar to MKFFIS GIS. • GFIS GIS takes very long time to show the login page, if it is accessed over a long distance. • Speed to show FMUs is slow, and from time to time it fails to show them.	TRINITY	0%	25.10.2013	05.11.2013	05.11.2013	
	b) GFIS GIS shall be optimized by execution speed	TRINITY	0%	25.10.2013	05.11.2013	05.11.2013	
	c) Optimization is not limited to source code level. All the possible factors shall be taken into account. For example, server configuration, deployment of files, network structure, use of external servers (Google server for jQuery), indexing of tables in databases, etc.	TRINITY	0%	25.10.2013	05.11.2013	05.11.2013	
	d) Improvement of performance should be shown quantitatively.	TRINITY	0%	25.10.2013	05.11.2013	05.11.2013	
8.	**Installation/QA/Training/Documentation**						
4.8.1	MKFFIS and GIS Installation, Quality Assurance, Training, Documentation						
4.8.2	GFIS and GIS Installation, Quality Assurance, Training, Documentation						

4.4 Add New Functions to MKFFIS

4.4.1 We have started to work on the MGRS GRID. The idea is taken from the script that Mr. Kozu created. The lines are drawn from code, but when a user select a particular section of the grid a polygon is created on top of the grid containing the bounds of the quadrant. This is needed for getting the information via the intersection function provided by Openlayers. We are confident that the GRID will be done by 31.11.2013

4.4.4 Add function to fill section 5.1 in P2 report taking meteorological data from AWS. SIMT
Target: MKFFIS Fire Report
Waiting for test on side be CMC/JICA and approval.
Demo is on test side.

4.5 Add New Functions/Interface to GFIS

4.5.4 Search FMU by year of expiry of special plan SIMT
Target: GFIS Planning
History for forms 1, 3a, 4, 5, 6, 7, 8 and 9 with printing is done and login page with choose of history is done. Still forms 2, 2a and 3 need to be done, and also reports according to the history plan.
Demo is on test side.

4.5.5 Change monthly input to daily for form 3, 3a and 5 SIMT
Target: GFIS Planning
Waiting for test on side be PEMF/CMC/JICA and approval.
Demo is on test side.

4.5.6 Keep annual achievement for 10 years in Form 6 SIMT
Waiting for test on side be PEMF/CMC/JICA and approval.
Demo is on test side.
Target: GFIS Planning

4.5.7 Keep annual achievement for 10 years in Form 8 SIMT
Waiting for test on side be PEMF/CMC/JICA and approval.
Demo is on test side.
Target: GFIS Planning

4.5.8 Fill area in Form 1 taken from polygon attribute SIMT
Translation to English need to be done. Demo is on test side.
Target: GFIS Planning

4.5.9 Add National and Regional office level summaries to the reports in Reports/Rekapitulari menu. SIMT
Target: GFIS Planning
Waiting for test on side be PEMF/CMC/JICA and approval.
Demo is on test side.

4.5.10. Middle aged forest
Input is completely done. Is some reports automatically is added group for middle aged forest. In the others, that need to be done. Demo is on test side.

4.6 Improvement related to both MKFFIS and GFIS modules

4.6.1 Modify PEMF Fire Report input module to report by fire. SIMT
Input form is done for insert and editing. Printing is done. Demo is on test server. Initial testing and transfer to CMC Forest Fire report need to be done. Demo is on test side.

4.7.1 Trinity extensively works on finding ways of fixing the performance issues. Unnecessary scripts are being deleted, performance tuning on the loading of the layers is done, external loading of the scripts is done etc.

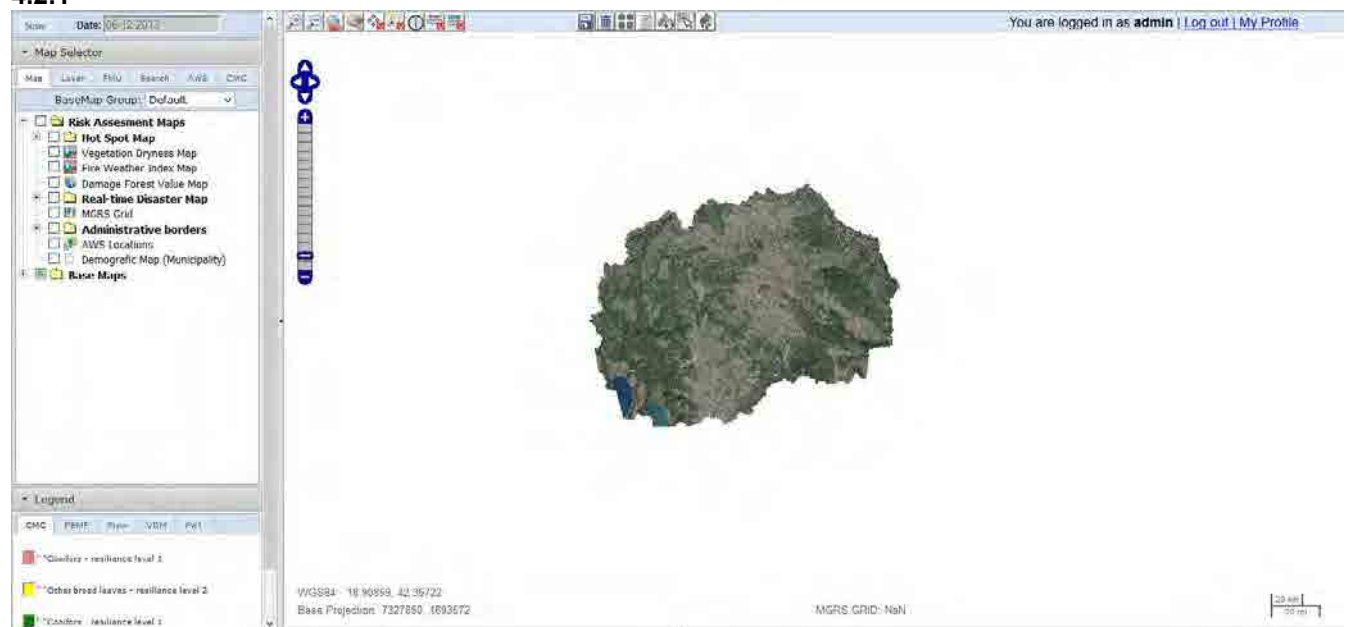4.4.1 We have some questions about this issue, our plan is to discuss them on Monday- TRINITY
4.3.5 c. We think that this is not necessary, our proposal is to remove this point- TRINITY
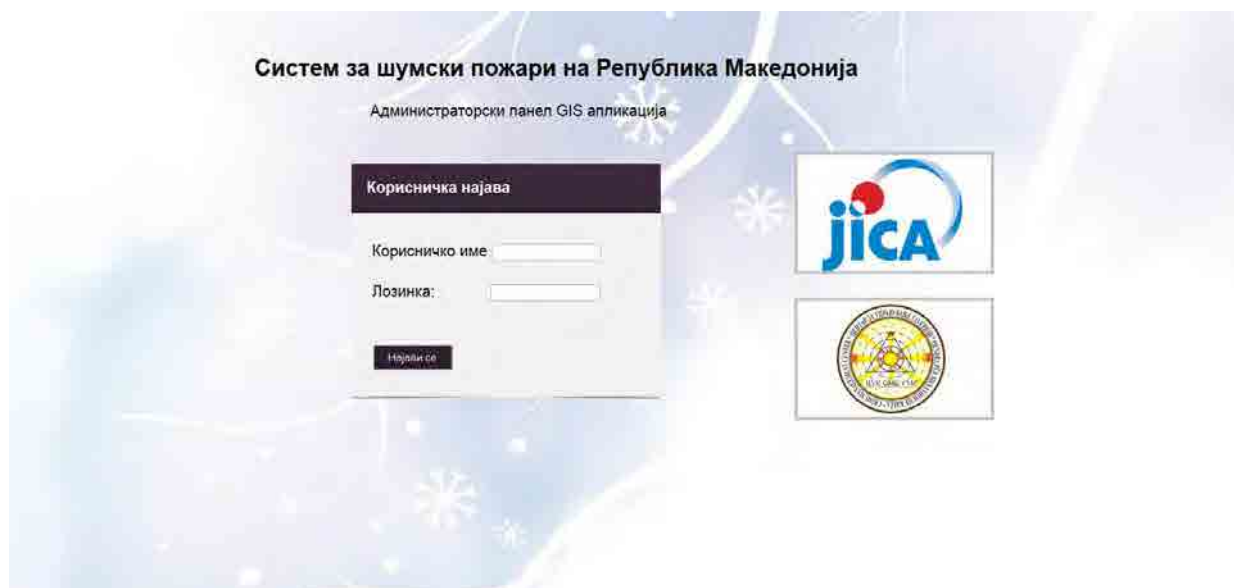
Presentation
At Wednesday, 20.11.2013, SIMT made presentation of the new modules from SD2 that is done so far. Main agreement/remark was that function 4.5.9 is main benefit from the new functions to the planning engineers and other function will be very useful for employees in the regional centers, but not for planning engineers. That's why we should think about presentation to them, and maybe training also for them. Other remark is about functions for SD1, and they need in the navigation panel, when moving from one sub compartment to another, in forms 2 and 2a, to have text boxes for direct navigate for other sub compartment, because already made searching need two more clicks.

In addition we are sending print screens of our application on the mkffis1.cuk.gov.mk server – TRINITY
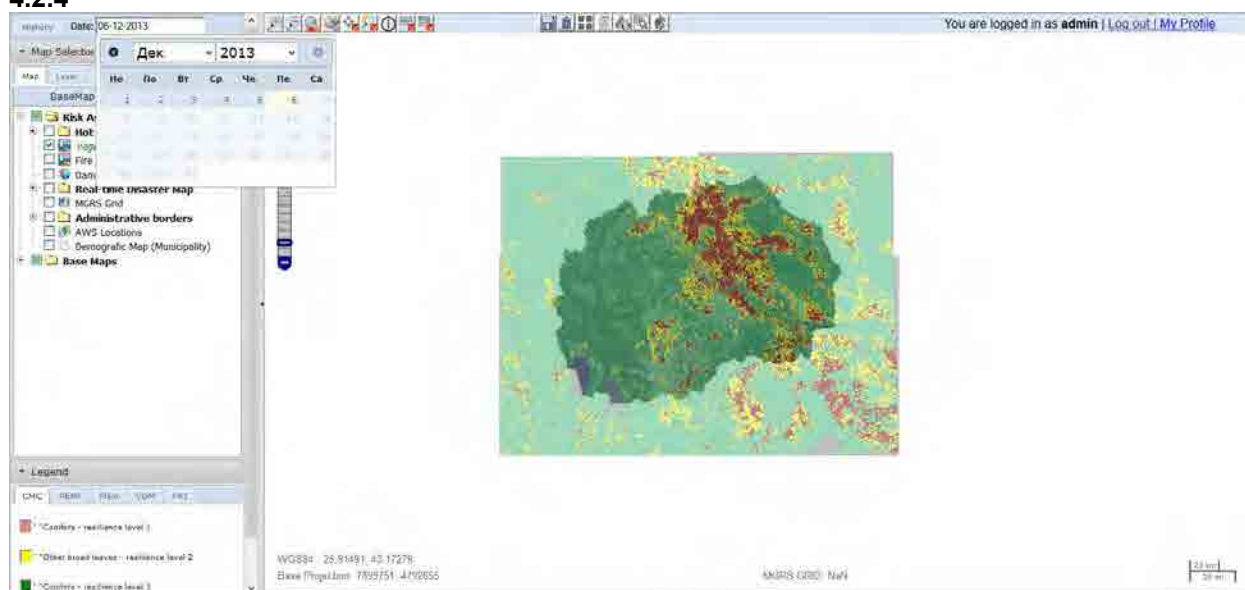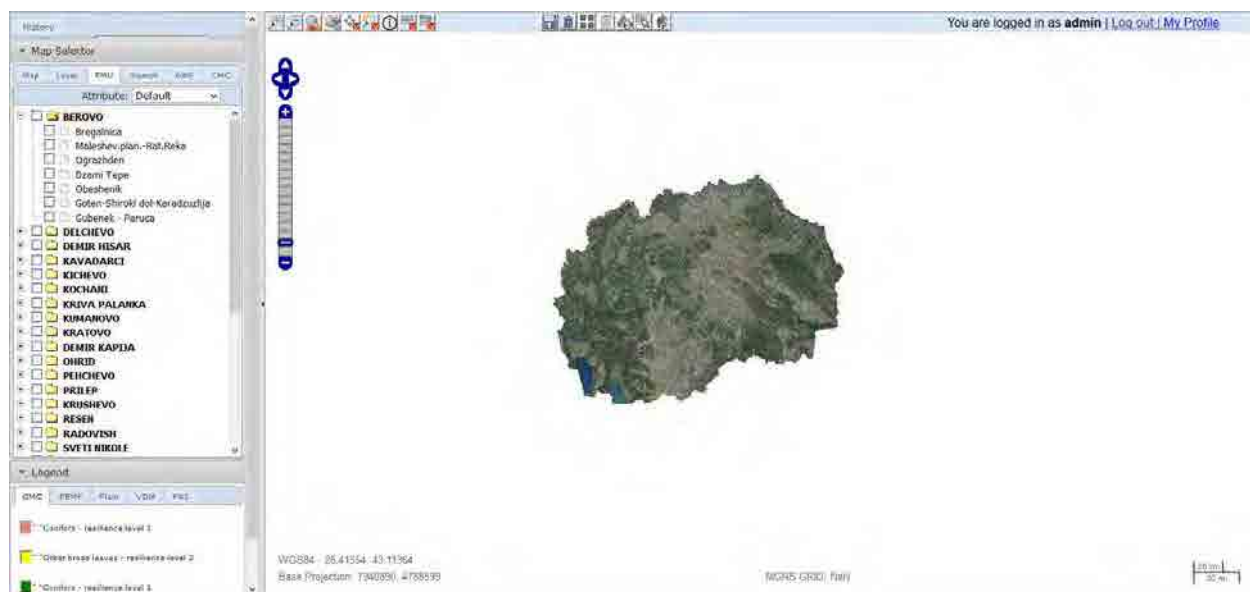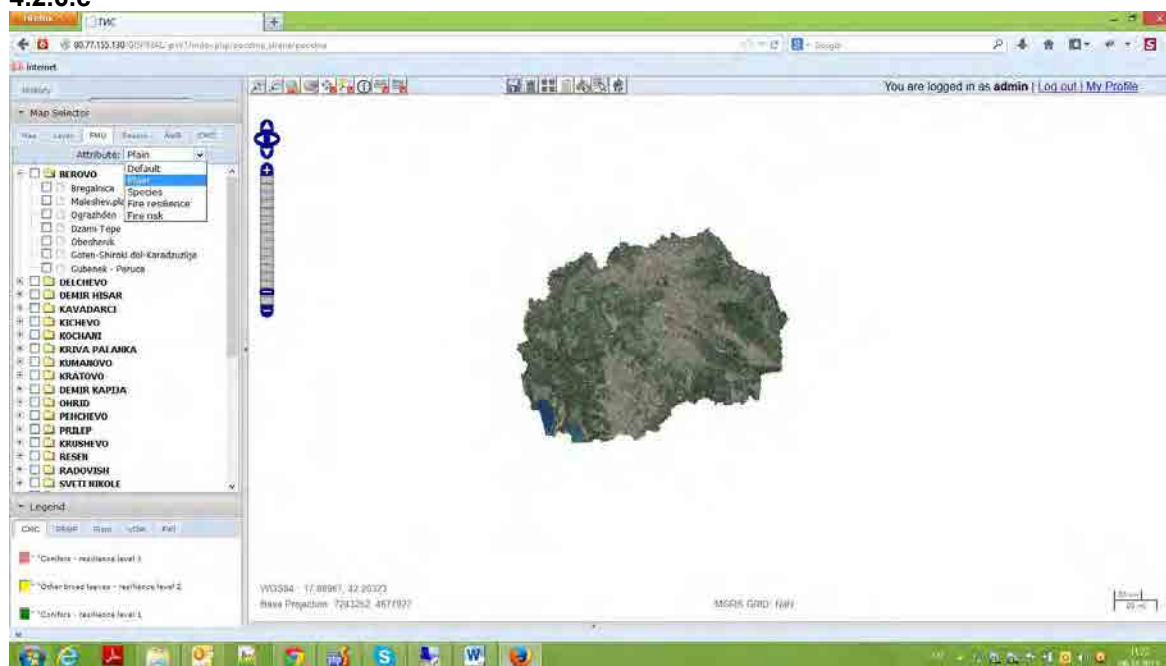**4.2.1**

4.2.3

4.2.4

4.2.6

4.2.6.c

4.3.3

4.3.4

4.3.5

4.4.1 a

4.3.5.3

4.3.5.4

4.3.5.5
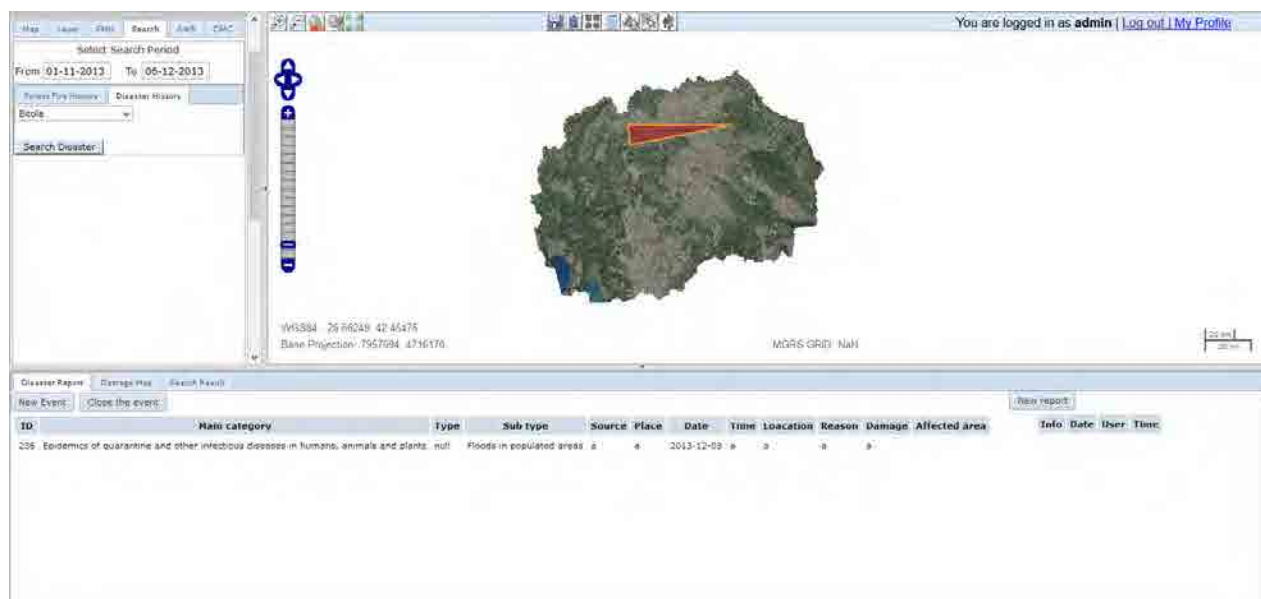
Next available ID: 382

Status	Responsible	Priority	ID	FSD No.	subject		Issues (Yellow part : Please hold action.)	by	issue raised on
1:not yet	CMC and Trinity	2:Now	373		Topomap		One part of topomap is distorted near AREC map no. 831-2-1 (34TEL3026) by maximum 1km. See the Picture sheet. Please re-join map parts after CMC obtained proper map from MAFWE.	PEMF	13-Feb
1:not yet	SIMT	2:Now	332		AWS add		In HM UIF for adding new AWS (managing AWS) into HM MySQL database, please set coordinates as mandatory fields.	Honda	23-Jan
1:not yet	SIMT	2:Now	333		AWS add		Check the AWS coordinates of Krushevo and all other AWS that you installed. SIMT is the best person who can confirm the exact positions of AWS's. Then, let us together update the data using HM UIF created by SIMT so that we can observe and confirm that the updates are properly reflected to all the chains (HM MySQL -> CMC MySQL -> CMC Postgres table: meteorologicalstations -> DB:GISMAP TBL:AWS.)	Honda	23-Jan
1:not yet	SIMT	2:Now	344		FF rep CMC	Export	Format CSV file: (done) Unusable data because of the time format mixture. DD/MM/YYYY HH:MM is the desired format. (done) Take care of null values appearing as 1/1/0001 12:00:00 AM. some records are divided into two parts in between regional center and municipality as seen in the attached file. Please correct.	Honda	30-Jan
1:not yet	SIMT	3:Before final payment	133	mkffis	AWS add		When adding new AWS to HM database, 1. It should be reflected in CMC database DB:CUK TBL:meteorologicalstation 2. It should also be reflected in DB:GISautomap TBL:AWS with proper geometry column 3. Geometry column should be re-calculated everytime the meteorologicalstation record is updated 4. It should be stated in maintenance manual that developer or user should not add AWS directly into DB without using user I/F because mandatory fields are not checked by database engine but in UIF.	mtg	23-Dec
1:not yet	SIMT	3:Before final payment	294		AWS quality assurance		AWS data quality check routine is skeptical. For example, Skopje AWS is recording temperature of -40 degree on Dec. 3, 8, and 18 which is not supposed to be reliable, but is-reliable flag is ON for these.	Kozu	13-Jan
1:not yet	SIMT	3:Before final payment	329		FF rep CMC	Export	(done) Not all the reported items are selectable. Especially, all the items for analysis are missing from the selection list. Nothing for 3.detection, 4.cause, 5.condition, 6.fire type. These are extremely important when exported to Excel file for further analysis. Review all the items. ID137 can be cancelled if this function becomes perfect. (NOT YET) In English mode, make ENG fields selectable. This English part is the lowest priority before final payment.	Honda	21-Jan
1:not yet	SIMT	4:MT	346		FF rep PEMF		In the list of PEMF reports, if I select a report from pages other than 1st page, page jumps back to the first page.	Honda	30-Jan
1:not yet	SIMT	4:MT	347		FF rep PEMF		In the preview and edit after control mode, show CMC report number after PEMF report number.	Honda	30-Jan

Status	Responsible	Priority	ID	FSD No.	subject		Issues (Yellow part : Please hold action.)	by	issue raised on
1:not yet	SIMT Trinity	3:Before final payment	268	mkffis	ff report		Prohibit the direct entry to FF reports capturing program. CMC FF report should always be accessed from MKFFIS link and PEMF FF report from GFIS link. (NEVER use IP address at any moment in the manual.)This should be applied only for the real-run MKFFIS not on test server.	Honda	30-Dec
1:not yet	Trinity	1:Urgent	337		FF search result		PEMF search does not seem to work. The following reports are searchable by GCUK:Southwest and also by Municipality:Drugovo, but not by PEMF:Kichevo. CMC Report Number 0112014 and 0122014 in RPEMF:Kichevo FMU: Ljuben -Srbjani 85a+86a	Honda	25-Jan
1:not yet	Trinity	1:Urgent	376		legend		Please put legend for 10 yr. risk	PEMF	13-Feb
1:not yet	Trinity	2:Now	293		FWI		The period to display FWI map is being set in a table created by SIMT. Now it seems like the period is hard coded as it does not display after changing the period. Please display according to the table variable.	Kozu	13-Jan
1:not yet	Trinity	2:Now	296				link from GFIS to MKFFIS	Igorche	16-Jan
1:not yet	Trinity	2:Now	315		GFIS		In GFIS, (not yet) In MK mode, name of FMU in EN (done) in English mode, name of maps in MK.	Honda	21-Jan
1:not yet	Trinity	2:Now	320	Pub. MKFFIS			On PublicMKFFIS, baseMaps Group should have selections of Google Hybrid / Google Satellite / Google Terrain / Google Street / Open Street map. Orho and topo will remain, but the default will be Google map. -->Igorce san? We will not show Vector maps(Administrative units is redundant) on public MKFFIS.(done)	cg	22-Jan
1:not yet	Trinity	2:Now	336		infobox		Info box does not show data in IE and Safari. (MK message probably says: no data at selected point)	Kozu	24-Jan
1:not yet	Trinity	2:Now	381		GFIS		Name of the zip file should reflect downloaded FMU name just as in SD1. Now it is a fixed name "groupshape.zip".	PEMF	24-Feb
1:not yet	Trinity	3:Before final payment	99	mkffis	basemap grp		Google maps can be selectable only for public MKFFIS if CMC wants. Google maps are not allowed to be used in member sites. If CMC decides to use Google maps for public, more selection should be added such as Satellite, Terrain, Road map, etc.	Kozu	19-Dec
1:not yet	Trinity	3:Before final payment	307	4.5.2			Limit available FMU by user privilege a) Add a function to the GFIS Admin page in order to specify FMUs under responsibility of each user. b) Limit FMUs to display and/or edit according to above privilege. c) Limit FMUs shown in the FMU Selector according to above privilege. d) Zoom in FMU under responsibility of the user when that user opens GFIS GIS. ->reconfirm feasibility	FSD	16-Jan
1:not yet	Trinity	3:Before final payment	352		legend		4. In the legend, avoid similar shades of colours, such as red and light red, as they are hard to tell apart. ->SPECIES: color set will be provided by PEMF Miro ->10yr.Risk: color set will be provided by CMC Igorche ->HotSpots: color set will be provided by CMC Igorche	mtg	4-Feb

Status	Responsible	Priority	ID	FSD No.	subject		Issues (Yellow part : Please hold action.)	by	issue raised on
1:not yet	Trinity	3:Before final payment	369		Browser		In Chrome, if we add maps while the window is maximized, left pane and all the tools disappear. Only maps remain.	Kozu	10-Feb
1:not yet	Trinity	4:MT	20	4.2.1	All tabs		Height of legend tab should be manually adjustable. （As we discussed in the meeting） Also, once the height is adjusted, the height to be common to all the tabs. (We do not adjust the height for each tab such as map, layer, fmu, etc.) height for Search, AWS, CMC change slightly from the rest -map, layer, FMU.	Kozu	10-Dec
1:not yet	Trinity	4:MT	126	4.2.1	tool bar		Take off horizontal and vertical scroll bars from tool bar.	Kozu	23-Dec
1:not yet	Trinity	4:MT	129	mkffis	basemap grp		Max extent of zoom out for google map should be set just as ortho map. MGRS grid program does not assume the situation when the map is zoomed out in Europe level, or World level (it assumes only the use around neighboring countries)->Trinity to explore the way.	Kozu	23-Dec
1:not yet	Trinity	4:MT	130	mkffis	basemap grp		At some timing, ortho and google map will have discrepancy of more than 10 km. We could not find the timing and cause of this, but it happens sometimes. Trinity said it is done. Please explain cause and remedy taken. Otherwise we cannot test.	Kozu	23-Dec
1:not yet	Trinity	4:MT	137	4.2.1.f	search		FF History search result table: Can we sort the table by clicking the field name? (maintenance period)	Honda	23-Dec
1:not yet	Trinity	4:MT	141	4.3.5			Search result table for assets and facilities: Some characters in data corrupt. (maintenance period)	Kozu	23-Dec
1:not yet	Trinity	4:MT	210	4.2.1.f	search		FF History search result table: In the maintenance period: result table to be nested. If we click + button on a record of common infor for the fire, affected subcompartments info to be shown: Management Units Code, Management Units Name, Compartment, SubCompartment, Burned Area(ha) per SubC, Burnt Volume per SubC, main species, etc.	stevko	26-Dec
1:not yet	Trinity	4:MT	267	4.3.3	mgrs		Make Emergency Grid ON automatically when E-grid button is clicked.	Gjorgji	30-Dec
1:not yet	Trinity	4:MT	299	4.3.5.3			Demographic map should be discussed with CMC in maintenance period.	FSD	16-Jan
1:not yet	Trinity	4:MT	300	4.3.5.5.c	disaster search		· Municipality and Settlement selector · Type of events are missing as search criteria.	FSD	16-Jan
1:not yet	Trinity	4:MT	302	4.4.1			The following is missing: · Summary of disaster events in the grid. Disaster events are in a database created by UNDP which is accessible from MKFFIS.	FSD	16-Jan
1:not yet	Trinity	4:MT	304	4.4.2			a) Show demographic information of an administrative area clicked (National, Municipalities, Settlements). When info button is clicked, show summary, and detail table representation to be shown below on the screen. Consult with CMC.	FSD	16-Jan
1:not yet	Trinity	4:MT	379		GFIS/MKFFIS		With Firefox and Chrome, the browser goes down if we leave the monitor on for more than a day or sometimes longer. Please keep MKFFIS ON for one week, monitor the situation, and come up with the solution.	Kozu	17-Feb

Status	Responsible	Priority	ID	FSD No.	subject		Issues (Yellow part : Please hold action.)	by	issue raised on
1:not yet	Trinity	4:MT0	298	4.3.5.1 4.3.5.2			For resource map, facility map, please confirm that data displayed is taken dynamically from UNDP database and not creating data copy on MKFFIS.--> If it is not dynamic, do this during maintenance period.	FSD	16-Jan
1:not yet	Trinity	4:MT0	308	4.5.3			**Allow access to past versions of forest plan--> we have not confirmed map past version ->reconfirm feasibility** **Are calendar control and show history buttons work to display past maps?** TRINITY: This issue is correlated with ID. 360; 308; 362 They don't want to see filtered polygons in one layer but in multiple layers.	FSD	16-Jan
1:not yet	Trinity	4:MT0	351		Tools		3. In the tools: Grid search all the way to Demographics, you first have to check and then go to use the tools. Enable that by clicking the tools, they are automatically selected from the side menu, and de-check the tools which are not necessary. -> This will be done as try-and-test in consultation with CMC during MT period.	mtg	4-Feb
1:not yet	Trinity	4:MT0	359		GFIS		b. File name convention (nomenclature) of map files: Now this is not defined in nowhere and the system depends on PEMF engineer's good understanding. (i.e. any name they can put by mistake) In order to ensure the proper file names, do the followings: i. Clearly state the nomenclature in manuals in BOLD LETTERS ii. Create simple user interface to let users input some information and rename files according to the nomenclature iii. the above mentioned interface should cater for both completely new FMU and modified existing files. If this is done by Feb. 17, this training can be included in Kozu san's PEMF training. TRINITY: This issue is correlated with ID. 360; 308; 362;. We had a meeting with PEMF together with CMC representative and they stated a lot of changes that they want in uploading polygons for FMU (new plan or annex), uploading of polygon for Forest Fire, Search Forest fire and show earlier polygons of plans and annexes. Some of this functions should be done in MKFFIS as well. But since it will take a longer time to develop and test this functions we agreed this to be done in MT period.	mtg	4-Feb
1:not yet	Trinity	4:MT0	361		GFIS		There is an error in uploading compartment polygons with "geometry type mismatch: multi polygons not allowed……" This should be rectified. -> will be done together with 362	mtg	4-Feb
1:not yet	Trinity	4:MT0	362		GFIS		c. We have not seen that any damage polygon / modified FMU data are displayed on MKFFIS. Although this is within SD1, can you demonstrate us in the test machine? -> This will be done after Trinity reflects PEMF's request (keeping history data for damaged area polygons and FMU's). -> PEMF's request and design change will be described by Trinity and will be sent to the Project TRINITY: This issue is correlated with ID. 360; 308; 362	mtg	4-Feb
1:not yet	Trinity	4:MT0	371		Damage map		Please add grand total for Intersected area column at the end.	Honda	11-Feb
1:not yet	Trinity	4:MT0	372		FMU Info		I did "Display info box of one subcompartment, then I change to Form9 from drop-down, click on View form. Form8 is shown instead of Form9.	Honda	11-Feb

Status	Responsible	Priority	ID	FSD No.	subject		Issues (Yellow part : Please hold action.)	by	issue raised on
1:not yet	Trinity	4:MT0	380		GFIS		GFIS version 2 should be uploaded as real-work system	Kozu	17-Feb
1:not yet	Trinity	4:MT1	355		previlege setting		This point should be re-discussed with CMC-Operation Dusko and make final decision. 7. When a report is created, add the option to edit or delete that report only by the author. Make groups of users (RCMC or Major RCMC) to have privilege to create or edit a single report.	TOT	31/1
1:not yet	Trinity	4:MT1	363		daily events		Now, real-time events polygons are related to events. It was requested by CMC to relate them to each report. Details to be discussed in February after trainings will be over with CMC-Operation including how to show in History and how to show in Search.	mtg	4-Feb
1:not yet	Trinity	4:MT1	370		message		"There are no VDM maps published for selected date" message sometimes appears when NOW status and there is VDM.	Honda	11-Feb
1:not yet	Trinity	4:MT2	374		GFIS	datatable	Take off data tables for damage map and disaster report from GFIIS	Kozu	14-Feb
1:not yet	Trinity	4:MT2	375		GFIS	Popup	Pop up message of "New disaster report" is not necessary on GFIS.	Kozu	14-Feb
2:needs further testing	SIMT	4:MT	73	4.6	FF rep PEMF	2.1	All the data which can be taken from inventory should be populated into PEMF FF report automatically. (e.g. exposition, slope, type of forest, main specied, etc.) The data should be editable. Seems ok. Needs to check whether correct data is taken from inventory.	PE-Igor	17-Dec
2:needs further testing	Trinity	4:MT	311	7			Performance Tuning. Minify Java Script and Indexing of tables and utilizing SDN. ----> do as much as you can before payment. Continue in maintenance period.	FSD	16-Jan
2:needs further testing	Trinity	4:MT	22	3.1.2	Browser		MKFFIS should be usable also with Chrome, IE, Safari	Kozu	10-Dec
2:needs further testing	Trinity	4:MT	152	4.3.4	Damage map		Sometimes intersected area is invisible although search table shows the data of inner polygon. ->seems ok 2:Now, but needs to keep watching. Trinity said it is done. Please explain cause and remedy taken. Otherwise we cannot test.	Honda	24-Dec
2:needs further testing	Trinity	4:MT	200	4.2.1	layers		Sometimes layer which was selected in map does not appear in Layer panel while actual map is displayed. Recurring rule unknown. Trinity said it is done. Please explain cause and remedy taken. Otherwise we cannot test.		
2:needs further testing	Trinity	4:MT	201	4.2.1	layers		Sometimes base layer is placed outside of base layer group on the tree. Recurring rule unk2:Nown. Trinity said it is done. Please explain cause and remedy taken. Otherwise we cannot test.		
2:needs further testing	Trinity	4:MT	270	4.3.4	Damage map		While drawing polygon, it is hidden below the map. Recurring rule unknown. Trinity said it is done. Please explain cause and remedy taken. Otherwise we cannot test.	Honda	8-Jan
2:needs further testing	Trinity	4:MT	284				Orthomap comes on top of all the maps and I cannot put it back to the bottom unless I refresh	Honda	10-Jan