

Japan International Cooperation Agency (JICA)
Public Works and Transport Institute (PTI)
Department of Public Works and Transport of Vientiane Capital (DPWT)

**Project for Urban Development
Management
in Lao PDR**

Completion Report

March 2017

Tomohiro Hasegawa (JICA Long Term Expert)

NIPPON KOEI CO., LTD.

TAMANO CO., LTD.

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17-050

Japan International Cooperation Agency (JICA)
Public Works and Transport Institute (PTI)
Department of Public Works and Transport of Vientiane Capital (DPWT)

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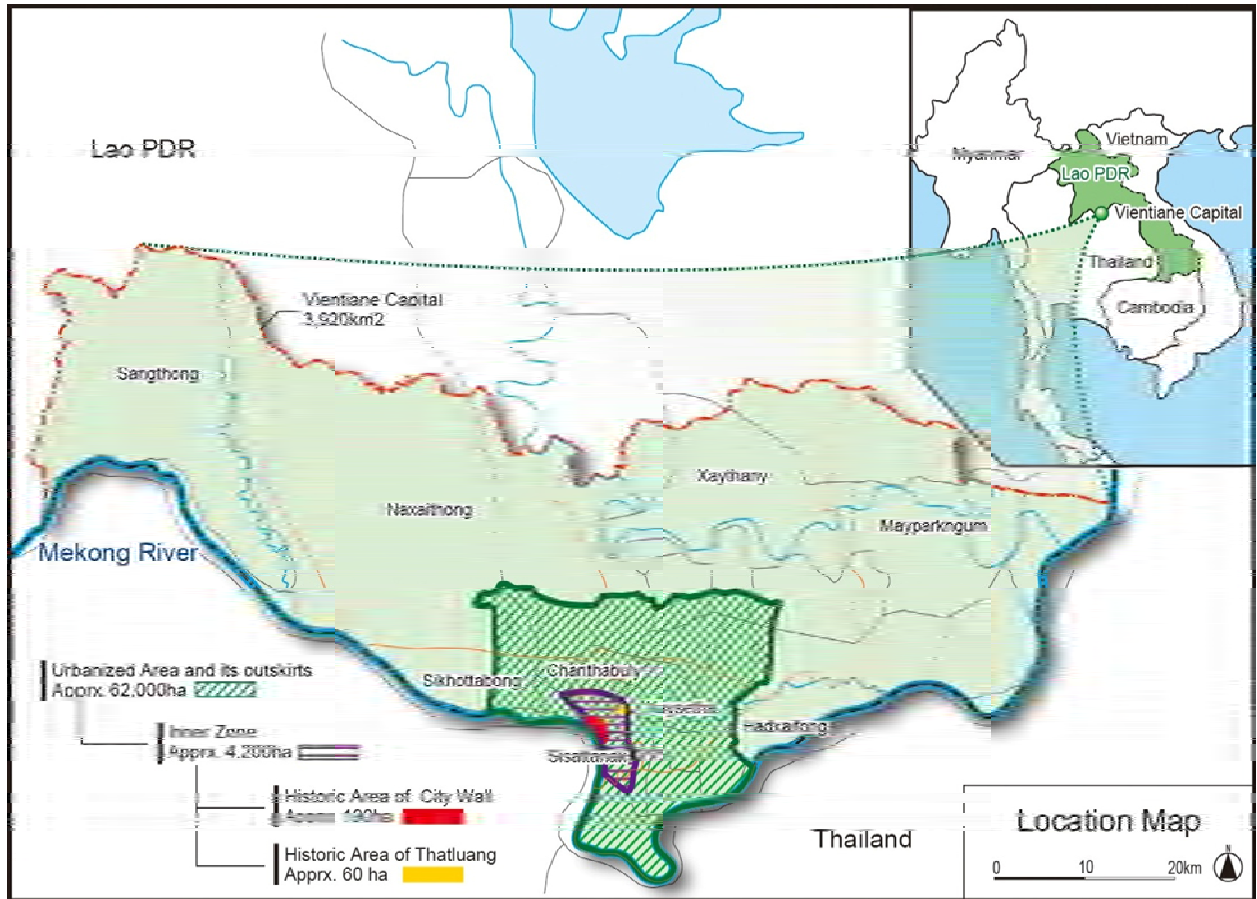
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Location Map



Project for Urban Development Management in Lao People's Republic Completion Report

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Abbreviation (Organizations)

	Meaning & Explanation/Remark
MPWT	Ministry of Public Works and Transport
DHUP	Department of Housing and Urban Planning
PTI	Public Works and Transport Institute
VTE	Vientiane Capital
DPWT	Department of Public Works and Transport of VTE
OPWT	Office of Public Works and Transport of Districts in VTE
CMC	Construction Management Committee

Abbreviation (Technical Terms)

	Meaning & Explanation/Remark
LUZ	Land Use Zone, such as Residential Zone and Commercial Zone.
LUP G-LUP D-LUP	Land Use Plan: a map showing allocation of various Land Use Zones. General Land Use Plan Detail Land Use Plan
ZC G-ZC D-ZC	Zoning Code: a set of building regulations from the viewpoint of city planning. General Zoning Code Detail Zoning Code
H	Building Height: from the road level to the highest point of the building (excluding Lao traditional slope roof).
E	Land Use Ratio: Floor area of the first floor. It is similar with BCR (Building Coverage Ratio) , but a little bit different.
COS	Land Use Coefficient: Same with FAR (Floor Area Ratio)

CHAPTER 1 OUTLINE OF THE PROJECT

1.1 Background of the Project

Vientiane Capital, which is the capital city of Lao PDR with population of 700,000, is gateway of domestic and foreign investment and provides employment opportunity. Recent economic growth and population growth have triggered rapid urbanization and is creating problems of infrastructure, public services, green open space, and living environment. It is expected that the population of Vientiane Capital would grow up to 1.4 million by the year 2030.

The Government of Lao PDR has issued “comprehensive economic strengthening through economic development, social development and natural environment conservation” in the Sixth Five Year Social and Economic Development Plan for Vientiane Capital as one of the goals, and is promoting urban development through social economic development and creation/conservation of urban environment/cityscape.

The Government of Japan assisted implementing “The Project for Urban Development Master Plan Study in Vientiane Capital” from 2009 to 2011. Then, “the Development Master Plan in Vientiane, targeting the year 2030”, hereafter referred to as Master Plan (M/P), was formulated in 2011. It was based on the development vision and social and economic framework targeting the year 2030, and proposed “multi-core structure”, which was composed of urbanization control and sub-center development in suburb area. It also proposed a land use plan and a basic strategy for infrastructure development based on the concept of “multi-core structure”, and improvement of institutional framework, after the discussion with Lao related organizations, such as the Ministry of Public Works and Transport (MPWT) and Vientiane Capital.

The Development M/P 2011 was agreed by the Government Ordinary Session in 2012, and its realization is expected. But, building control systems and urban development control systems based on the land use plan does not work well. In addition, capacity of Public Works and Transport Institute (PTI) and Department of Public Works and Transport of Vientiane Capital (DPWT) for urban development management is expected to be strengthened.

With an above background, the Government of Lao PDR requested “the Capacity Development Project for Urban Development Management” to the Government of Japan in order to strengthen the capacity of staff regarding urban development in Vientiane Capital to implement urban planning and development management. In this project, Urban Development Management includes:

- (i) to manage legal documents,
- (ii) to create and establish a city plan,

- (iii) to manage urban control systems regarding urban development, building construction, and cityscape, and
- (iv) to understand urban development project scheme.

1.2 Objective of the Project

Project Outline	
(i)	Overall Goal: <ul style="list-style-type: none">- Urban development in Vientiane Capital will be managed consistent with established City Plan
(ii)	Project Purpose: <ul style="list-style-type: none">- The Capacity of staff regarding Urban Development in Vientiane Capital to implement Urban Planning and Development Management will be strengthened
(iii)	Outputs: <ul style="list-style-type: none">1: Capacity on analyzing structure of legal documents related to urban development management and proposing improvement will be enhanced2: Capacity on creating basic data base (land use plan) for urban development management will be enhanced3: Capacity on urban planning of related agencies will be enhanced. (focus on Inner Zone and Historic Area)4: Capacity on urban development control will be enhanced (focus on Historic Area)5: Capacity on implementing cityscape projects will be enhanced through pilot project (focus on activities for cityscape in Historic Area)
(iv)	Project Area: <ul style="list-style-type: none">- Vientiane Capital (Population: 700,000 (2011)) (3,920km²)<ul style="list-style-type: none">➢ Urbanized area and its outskirts (core urban area*): mix of urbanization and agriculture area (Output 2) (62,000 ha)➢ Inner zone (target zone*) (Output 3, 4): Central Zone in the Urbanized area and its outskirts excluding airport and its surrounding area (4,000 ha) [Remark] The area of Inner Zone has been reviewed.➢ Historic Area (Output 3, 4, 5): Historic conservation zone along Mekong river and Thatluang area<ul style="list-style-type: none">• Historic area o City Wall (190 ha)• Historic area of Thatlunag (60 ha) [Remark] The area of Historic Area of Thatluang has been reviewed.
(v)	Organizations in Lao PDR: <ul style="list-style-type: none">[Related Organizations]- Ministry of Public Works and Transport: MPWT- Vientiane Capital[Implementing Organizations]- Public Works and Transport Institute (PTI)- Department of Public Works and Transport (DPWT) of Vientiane Capital
(vi)	Beneficiaries: <ul style="list-style-type: none">[Direct Beneficiaries]- Staff in charge of urban development in PTI (27 staff)- DPWT and OPWT in charge of urban development management (30 staff)- Residents in Historic Area and Inner zone (203,660 people)[In-Direct Beneficiaries]- General public of Vientiane Capital (700,000)

Source: Project outline is updated based on adjusted PDM agreed by JCC (4), April 27, 2015

* Term used in RD on July 25, 2013.

The Project is assisted by a long term expert (Urban planning management policy), seven short term experts, and a project coordinator (shared with Project for Urban Water Environment Improvement in Vientiane).

- (i) The long term expert provides necessary recommendations and advice to the Project Director, Deputy Project Director and Project Manager on any matters pertaining to the implementation of the Project as an Advisor (This assignment was mentioned in the Record of Discussions on 25 July as an assignment of the Japanese Team Leader.)
- (ii) Seven experts led by the Team Leader will give necessary technical guidance and advice to the Lao counterpart personnel (hereinafter referred to as C/P) on technical matters pertaining to the implementation of the Project.

1.3 Implementation of the Project

Government of Lao PDR, represented by PTI and DPWT, has been implementing the Project in cooperation with JICA.

JICA long-term expert (Advisor) has been providing necessary recommendations and advice to the Project Director, Deputy Project Director, Project Manager, and JICA short-term experts on any matters pertaining to the implementation of the Project.

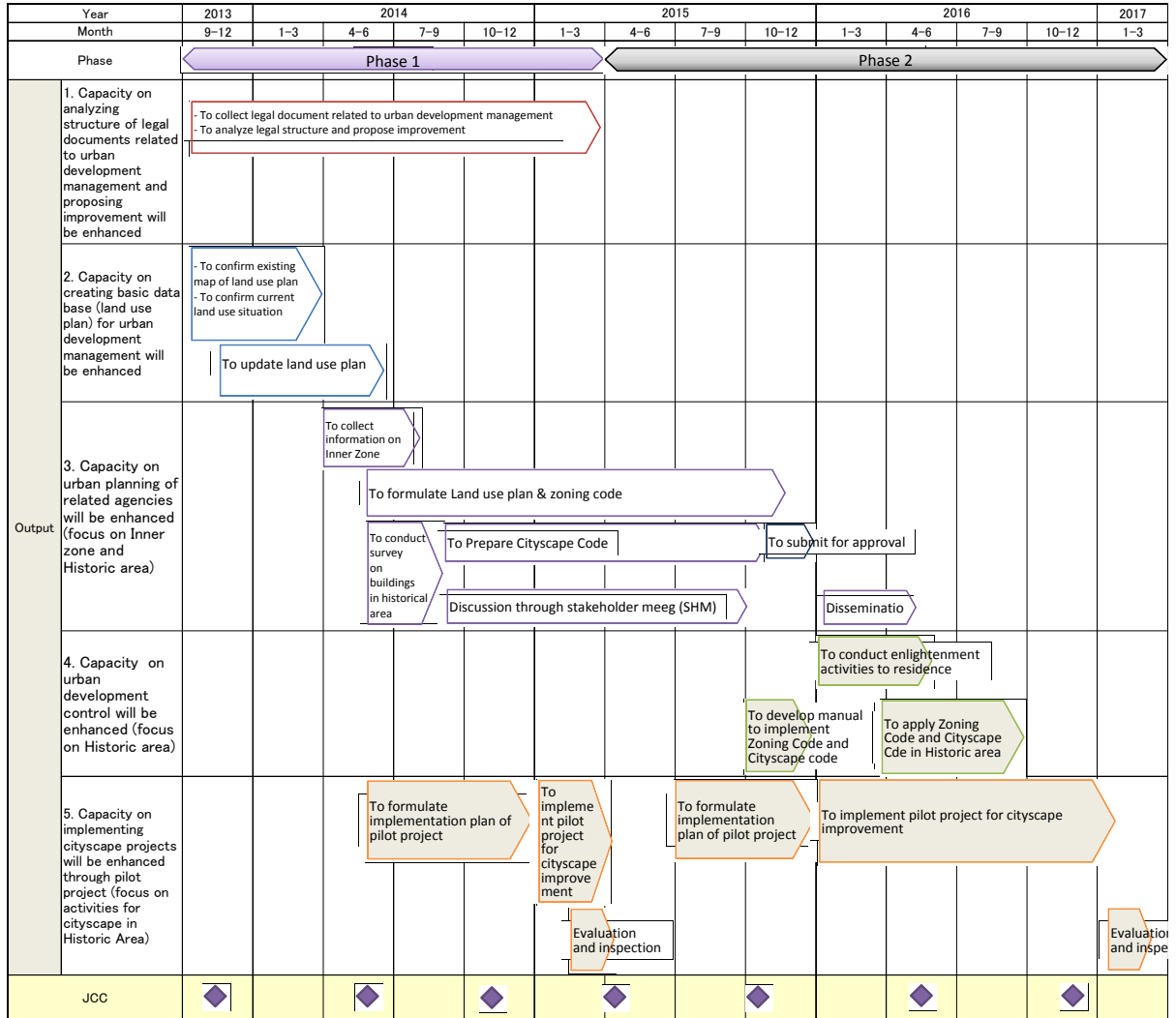
JICA short-term experts lead by the Team Leader have been giving necessary technical guidance and advice to the Lao counterpart personnel on technical matters pertaining to the implementation of the Project.

This Completion Report (Phase 2) is submitted to JICA, PTI, and DPWT by JICA long-term expert and JICA short-term experts in order to report what they have prepared, recommended, assisted, and achieved for the Project.

CHAPTER 2 ACTIVITIES

2.1 Work Flow

(1) Work flow



Source: JICA Project Team

Figure 2.1 Work Flow

(2) Work items

Work items (Plan and Record) are shown in the table below. Since types of Pilot Projects has changed from physical project to non physical project, item (8) which shows the work for Output 5 was updated in accordance with the actual work during the Phase 1. In Phase 2, physical component has been revived.

Table 2.2 Work Items (Plan and Record) (2/2)

Phase	Phase 1												Phase 2																
	2013			2014			2015			2016			2017			2018			2019										
	9	10	11	1	2	3	4	5	6	7	8	9	10	11	12	1	2	3	4	5	6	7	8	9	10	11	12	1	2
12	Capacity development for urban development planning (Focus on inner zone and historic area) (Output 3)												Plan																
	12-1-1 Approval procedure of land use plan & zoning code of inner zone												Actual																
	12-1-2 Training on the methodology of preparing the land use plan & zoning code of inner zone												Plan																
	12-2-1 Consensus building through stakeholder meeting (continues)												Plan																
	12-2-2 Follow up on the land use plan & zoning code approval process												Actual																
	Improvement of management and enforcement capability related to urban development (Main target: historic area) (Output 4)												Plan																
13	13-1 Dismissing approved zoning code and Chyscape code in historic area												Plan																
	13-2 Making/improving a manual for zoning code & chyscape code in historic area												Actual																
	13-3 Applying the zoning code & Chyscape code in historic area												Plan																
	13-4 Reviewing the experiences through the project works and training on operation and management												Actual																
Implementation of pilot project for capacity development for management of landscape improvement project (Focusing on Chyscape upgrading project in Historical												Plan																	
14	(1) Trial Events/Workshop												Plan																
	① Design of pilot project (objective, contents, target area) with implementing partners												Actual																
	② Announcement and enlightenment to stakeholders including residents and business												Actual																
	③ Announcement to general public (PR materials)												Plan																
	④ Conduct of workshop												Actual																
	⑤ Conduct of trial event												Actual																
	⑥ Conduct of count & interview survey on trial event												Actual																
	⑦ Support of community organization establishment for chyscape creation												Actual																
⑧ Evaluation of Pilot Project and recommendation												Actual																	
(2) Physical Components												Plan																	
① Pilot project selection												Actual																	
② Plan and design work												Plan																	
③ Tender preparation												Actual																	
④ Tender contract work												Actual																	
⑤ Construction supervision												Plan																	
⑥ Project evaluation and lesson learned												Actual																	
⑦ Inspection												Actual																	
15 JCC support for Phase 2												Plan																	
16 Support for terminal evaluation												Actual																	
17 Conclusion and recommendation												Plan																	
18 Preparation of Project Completion Report												Actual																	
Evaluation												Plan																	
Reports												Actual																	

Source: JICA Project Team

2.2 Improvement of Urban Development Control Systems

2.2.1 Objectives

Outputs of the technical transfer, the activities and the indicator are as follows (quotation from PDM);

- Output:
 1. Capacity on analyzing structure of legal documents related to urban development management and proposing improvement will be enhanced.
- Activities:
 - 1-1. To collect and analyze documents related to urban development management in Laos and in Vientiane.
 - 1-2. To clarify above mentioned documents, suggest points to be improved.
- Indicator:
 1. Report proposing improvement of legal documents related to urban development management in Laos.

2.2.2 Activities and Outputs of Technical Transfer

Long term expert proposed items to improve systems and regulations regarding:

- land use,
- land development activities, and
- building construction.

Its outline is as shown in (1) to (8) below, and its detail is compiled in the report (Attachment 1).

These proposals have been discussed in the Project, and were reflected in the drafts of:

- “G-LUP/ZC in Vientiane Capital” compiled as a part of “Development Master Plan of Vientiane Capital” by DHUP,
- “Ministerial Order on Construction Management Regulation (Essential Part)” and its Guideline (Attachment 2), and
- “Vientiane Capital Governor’s Decision on Urban Management Regulation, including D-LUP/ZC of Historic Area and Inner Zone” and its Guideline (Attachment 3).

(1) Certification and Permission

(a) New system of “(U) Urban Planning Certificate” shall be established.

(b) “Construction Permission” shall be divided into two steps of:

- “(L) Land-development Permission” and
- “(B) Building Permission”,

because they are different in stages and applicants in many cases.

When the project does not involve new construction of road, only “Building Permission” is required.

(2) Statements of Criteria

(a) To state criteria (LUP/ZC) in a manner of identifying:

- Mandatory provisions, and
- Recommendable provisions.

(b) To make each role of regulation and guideline clear.

(3) Countermeasures

(a) Relationship between permission and countermeasures

It shall be clearly stated that countermeasures can be done with the reason that the building does not comply with LUP/ZC, regardless the issue of the permission. And necessary provisions shall be provided.

(b) Power to conduct countermeasures

- Obligations of related people, and
- Power of countermeasures, which is given to the authorities, shall be clearly stated in the regulation.

(4) Special Treatment

Procedure of Special Treatment through Construction Management Committee shall be established for the difficult judgment.

(5) Projects in SEZ, etc.

It shall be clear how to handle SEZ projects, etc.

(6) Legal Documents

There are some legal documents to control land use, land-development activities, and building construction as shown in below.

In order to improve current systems and regulations,

- “Ministerial Order on Construction Management Regulation (2005/2013)” shall be revised,
- “G-LUP/ZC of Vientiane Capital (2002/2007)” shall be revised, and
- “Urban Management Regulation of Vientiane Capital with attachment of D-LUP/ZC of (1) Historic Area and (2) Inner Zone” shall be established, and
- (3) D-LUP/ZC of the next area shall be established in near future.

(7) New G-LUP/ZC

(a) G-LUP/ZC (Current)

Current G-LUP/ZC, which were issued in 2002 and 2007, has some problems as shown below, in its administration.

- (i) Many development activities take place outside of Land Use Plan area (21,000 ha).
- (ii) It is needed to review some regulations of ZC, because of:
 - Difficulty for understanding, and
 - Excessive requirements for ordinary buildings.
- (iii) Many buildings were constructed not complying with prescribed LUP and ZC. (both legal and illegal)

Therefore, it is needed to revise it.

- (b) G-LUP/ZC (New)
- (i) New G-LUP shall cover 61,600 ha.
 - (ii) Development Control Policy shall be set in considering characteristics of:
 - Urbanized area (ZPP, UA, UB, UC, UD, UF, UEa) of 21,600 ha,
 - Urbanizing area (UEb, UEi) of 12,800 ha, and
 - Urbanization control area (T, E, N, NE) of 27,200 ha.
 - (iii) New G-ZC shall be provided in a set of new 15 items below.
 - 1. Development/Preservation Policy of the Zone
 - 2. Land Use
 - 3. Technical Network
 - 4. Road and Gateway
 - 5. Characteristic of Site
 - 6. Distance from Site Boundary
 - 7. Distance among Buildings in a Site
 - 8. Road, Reservation Area, and Structure
 - 9. Building Height (H)
 - 10. Land Use Ratio (E)
 - 11. Land Use Coefficient (COS)
 - 12. External Feature
 - 13. Parking lot
 - 14. Vacant Space and Tree Planting
 - 15. Special Treatment
 - (iv) Guideline, which provides supplementary information, shall be provided together.

(8) LUP/ZC in Vientiane Capital

Current Law says,

- (a) "People must comply with **City Plan**." in Construction Law (2009) Article 5 and City Planning Law (1999) Article 27, and
- (b) "City Plan consists of General City Plan (**G-LUP/ZC**) and Detail City Plan (**D-LUP/ZC**)."
in Ministerial Order on City Planning Regulation (2006).

Current City Plan of Vientiane Capital does not have D-LUP/ZC. Therefore, D-LUP/ZC shall be established.

In regarding G-LUP/ZC and D-LUP/ZC, wherever D-LUP/ZC has been authorized, D-LUP/ZC will be the regulation that the people must comply with, instead of G-LUP/ZC.

2.2.3 Achievement of Technical Transfer

As the achievement of technical transfer, following understanding and capacity for Improvement of Urban Development Control Systems were enhanced, through a series of discussion, which was held as shown in the table below.

- Certification and Permission
- Control of Large-scale development
- Countermeasures against violation
- Handling of special case
- Compilation of legal documents

Table 2.3 Schedule of Discussion

Month	Date		
	Year of 2014	Year of 2015	Year of 2016
January			12, 19, 28
February			9
March		3, 6	29
April	4		6, 21, 26
May	7, 13, 24, 29	10, 29	6, 9, 11, 31
June	3, 13, 17, 23	9, 16, 30	7, 14, 28
July	25, 29	8	5, 12, 26
August	1, 4, 6, 18, 22	4, 18	2, 9, 16, 23, 30
September	2, 9, 16, 25	1, 22, 24	1, 13, 19, 27
October	27	8, 14, 26	
November	25	10, 17, 23	
December	16	7, 15	

Source: JICA Project Team

2.3 Update of the Land Use Plan (General) for Urbanized Area and Its Outskirts (62,000ha)

2.3.1 Objectives

Output of the technical transfer, the activities and indicator are as follows;

- Output:
 - 2 Capacity on creating basic database (land use plan) for urban development management will be enhanced. (Output 2)
- Activities:
 - 2-1 To confirm existing maps of land use plan in Vientiane Capital
 - 2-2 To update information related to land use situation, including new urban development plan(s) in Vientiane Capital
 - 2-3 To update land use zones (at scale of 1/30,000) for the area of Vientiane Capital proposed by JICA M/P study in 2011, with an area of 62,000ha
 - 2-4 To conduct training to staff related to urban development management
- Indicator: Updated land use plan with an area of 62,000 ha,

2.3.2 Activities and Outputs of the Technical Transfer

- (1) Confirmation of existing maps of land use plan in Vientiane Capital

Current land use plan of Vientiane Capital, with an area of 20,000 ha was formulated in 2002. After starting the Project, it was found that a regulation combined with the land use plan and the zoning code had been established by the Decision on Vientiane City Plan Management Regulation in 2007 and was under revision by DPWT of Vientiane Capital. For this, it was required that the general zoning code (called G-ZC hereafter) should be updated simultaneously with updating the general land



Source: JICA Project Team

Figure 2.2 Current Land Use Plan of Vientiane Capital

use plan (called G-LUP hereafter). Since updating of G-ZC was originally out of the scope of the activities, updating of G-ZC was implemented by C/P with technical support of long-term expert.

In addition, DPWT had been revising the land use plan. However, the revision was not considered expansion of the planning area, and just tried to readjust zonings in current planning area.

Outputs for technical transfer of this activity are as follows;

- Understanding of importance to clarify zone boundaries for building permission works
- Recognizing of contradiction between contents of zoning code and building permission work

- (2) Update information related to land use situation, including new urban development plan(s) in Vientiane Capital

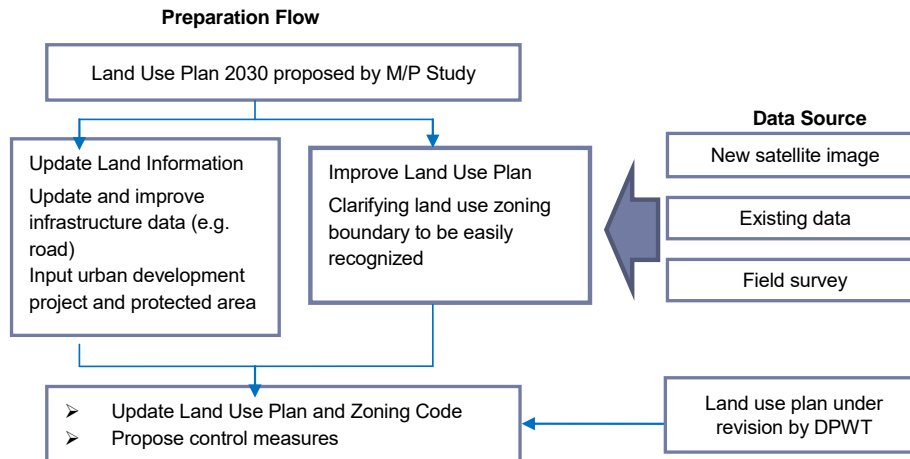
GIS database developed by M/P study in 2011 was updated with compiling new satellite image, information of new road development and large-scale urban development area. Satellite image as of 2008 purchased in M/P study in 2011 was replaced with new image as of 2012. Regarding large-scale urban development areas approved by the national government (Nong Ping, Thanaleang, 450 Development and That Luang) and industrial park, the coordinate data from DPWT was converted into GIS database. Detail activities relating development of GIS database is written in the section 2.7.

Outputs for technical transfer of this activity are as follows;

- Confirmation of development progress of new road and large-scale urban development
- Confirmation of boundaries of large-scale urban development areas
- Confirmation of current situation of scattered suburb settlements

- (3) Update land use zones (at scale of 1/30,000) for the area of Vientiane Capital proposed by JICA M/P study in 2011, with an area of 62,000ha

Updating of G-LUP was implemented by the collaboration work with C/P. The database of G-LUP was developed based on the GIS data developed by M/P study in 2011. This activity focused not only on revising of zone boundaries but also re-examining the character and function of each zone, and clarifying role-sharing with Detail Land Use Plan (hereinafter referred to as D-LUP) in the Inner Zone. In addition, revision of GZC was simultaneously implemented by C/P with supporting of long-term expert. The work flow is shown in the following Figure 2.3.



Source: JICA Project Team

Figure 2.3 Work Flow of Updating of Land Use Plan (62,000ha)

For the updating work, technical meetings were intensively held once a week during assignment time of Japanese experts in charge in order to gradually enhance C/P's understanding on the work. Contents of technical meetings are shown in the following Table 2.3. In addition, a lecture meeting for urban management measure including land readjustment method was conducted to response a request from C/P.

Table 2.4 Meetings for Updating Land Use Plan (62,000ha)

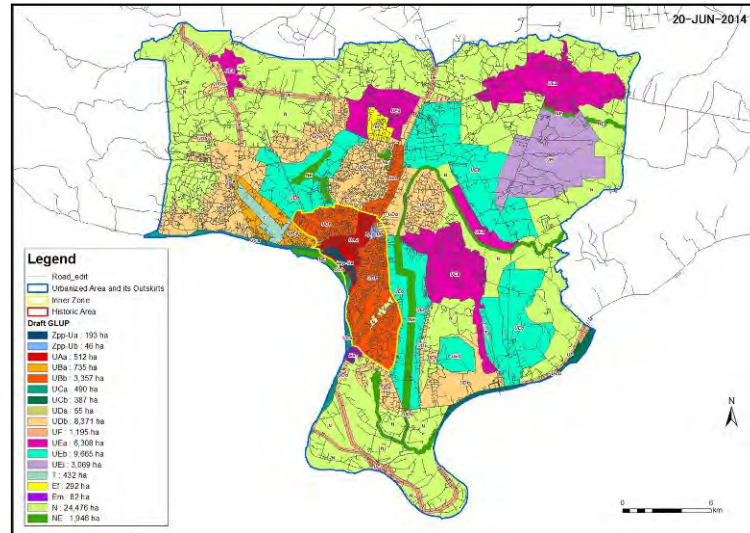
Title	Date	Contents
1st Technical Meeting	Feb 12, 2014	Kick-off for updating (target area, work flow, data sources and considerations)
2nd Technical Meeting	Feb 13, 2014	Lecture of urban management measure (inc. land readjustment)
3rd Technical Meeting	Feb 21, 2014	Discussion on specific issues on updating of land use plan (designating boundaries of conservation zone, and countermeasure to recent land use changing)
4th Technical Meeting	Mar 28, 2014	Discussion on draft land use plan and issues on the updating
5th Technical Meeting	Apr 4, 2014	Discussion on draft land use plan and control policy of each zone
6th Technical Meeting	May 29, 2014	Discussion on draft land use plan and draft zoning code
7th Technical Meeting	Jun 17, 2014	Discussion on final draft of land use plan and draft zoning code
8th Technical Meeting	Jun 20, 2014	Confirmation of final draft of land use plan

Source: JICA Project Team

The updating points of G-LUP are as follows;

- Clarification of zone boundaries (zone boundaries basically follow center line of physical structure such as road and canal)
- Addition of new zone (N) to conserve agricultural and forest area in suburb (building activities are basically prohibit, but building relating agriculture and forest activities can be constructed as special permission.)
- Revision of zoning of NE in order to conserve water courses

- Revision of zoning of UF in consideration of existing road side settlement in the suburbs
- Revision of zoning of UEa for sub-center development areas
- Addition of new zone (UEb) for large scale urban development areas approved by the National Government
- Changing zone category of industrial area from I to UEi as a kind of urban expansion zone



Source: JICA Project Team

Figure 2.4 Final Draft of G-LUP

Regarding updating of G-LUP, the draft G-LUP was finalized with C/P in the 8th technical meeting on 20 June, 2014. After that, DPWT is conducting the small-scale revision and discussing with other stakeholders. Thus, the indicator of ‘Update land use plan (general) for urbanized area and its outskirts in Vientiane Capital’ was achieved.

In addition, format of zoning maps to be attached to the regulation was revised from current mixed maps with different scales among zones, to same scale in consideration of the usability in building permission work.

Regarding updating of GZC, draft GZC was formulated by C/P with technical support of long-term expert. At present urban planning division in DHUP is discussing on draft GZC with other stakeholders. As the issue on approval of G-LUP and GZC, formulation of the infrastructure plan for road, water supply, drainage and waste management is required under the Urban Planning Law. It is expected that these approval procedures may delay due to time needed to prepare the infrastructure plan by Lao side.

2.3.3 Achievement of Technical Transfer

As outputs for technical transfer of this activity, understanding and capacity relating updating of G-LUP were improved as follows;

- Process of updating of land use plan

- Function of G-LUP and D-LUP in inner zone
- Basic idea and method of designation of zone boundaries
- Control measure of building and development for conservation of agricultural land and forest, and the designation policy of the zone boundaries
- New functions of zone for promotion of large-scale urban development
- Standardizing of scale of zoning map to be attached to the regulation

Update of the General Land Use Plan was completed in Phase 1. In addition, general zoning code has been prepared with the support of the Long term expert. Based on the result of update, Lao Government have been trying to approve the General Land Use Plan and Zoning Code. Several meetings have been held among related organizations in Lao Government. The plan was discussed in Vientiane Assembly in January, 2017. The plan is under revision based on the comments from the Assembly.

2.4 Formulation of D-LUP/ZC of Historic Area and Inner Zone (4,200ha in total)

2.4.1 Objectives

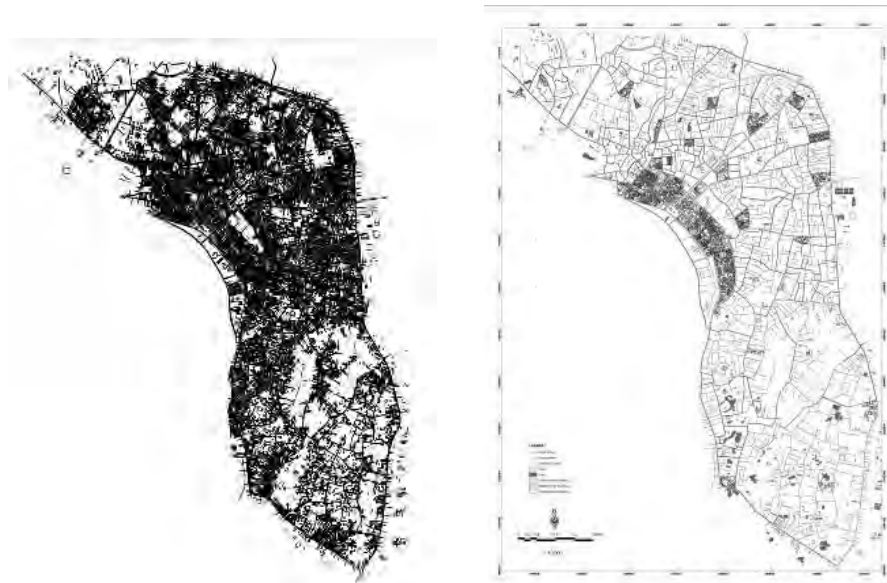
Outputs of the technical transfer, the activities and the indicator are as follows (quotation from PDM);

- Output:
 3. Capacity on urban planning of related agencies will be enhanced (focusing on Inner zone and Historic Area).
- Activities
 - 3-1. To collect existing data, map, and usage, height, FAR, BCR, etc. buildings in Inner Zone.
 - 3-2. To make:
 - draft of D-LUP/ZC, and
 - proposal for new countermeasures against violations in the field of urban development,for Inner Zone with consensus making through stake holder meetings, and to submit for approval.
 - 3-3. To conduct training to staff related to urban development management on technology in drafting LUP and ZC for a specific area.
 - 3-4. To conduct survey on buildings in the Historic area.
 - 3-5. To elaborate:
 - draft of D-LUP/ZC (including Cityscape Code), and
 - proposal for new countermeasures against violations in the field of urban development,for Historic Area with consensus making through stake holder meetings, and to achieve approval.
- Indicator:
 - 3-1. Draft Land Use Plan and Zoning Code, and countermeasures for Inner Zone.
 - 3-2. Land Use Plan and Zoning Code including Cityscape Code, and countermeasures for Historic Area.

2.4.2 Activities and Outputs of Technical Transfer

- (1) Collection of existing data, map, and usage, height, FAR, BCR, etc. buildings in the Target Zone
Topographical map to be used as a base map of land use plan in Inner Zone was developed by digitizing physical structure, large-scale buildings and other buildings in selected sampling blocks on the new satellite image. Data of road and buildings in Historic Area (190ha) was converted and revised from CAD data developed in 1999. This activity was implemented by sub-contracting work.

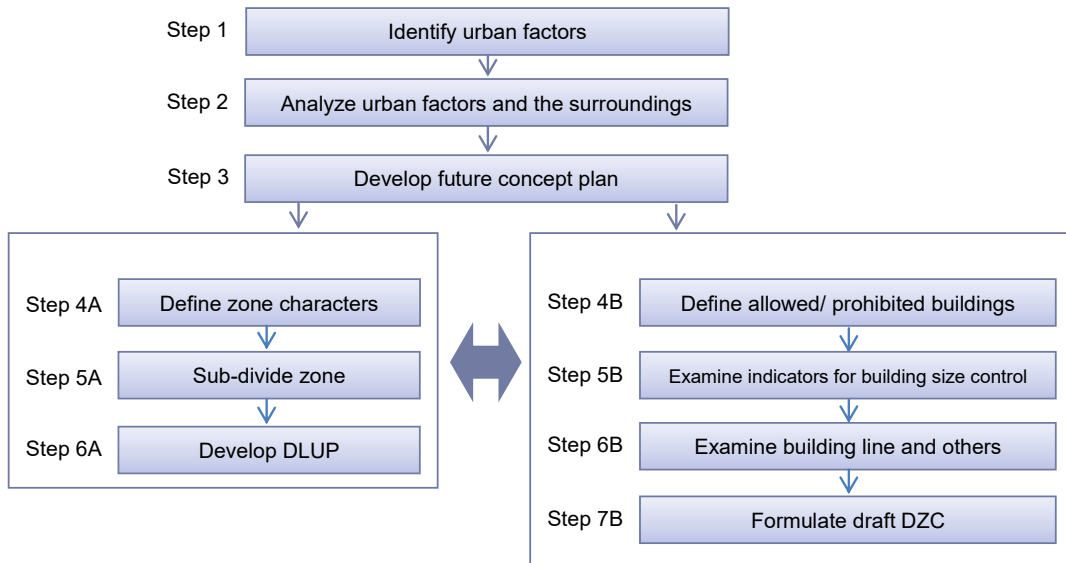
After completion of sub-contracting work, a topographical map was completed with additional digitizing work for remaining buildings by C/P staff. Developed topographical maps in Inner Zone are shown in the Figure 2.5.



Source: JICA Project Team

Figure 2.5 Topographical Map of Inner Zone
(Left: Output of outsourcing work, Right: Result of Additional Digitizing by C/P)

- (2) Formulating draft of D-LUP/ZC
Formulation of D-LUP/ZC were implemented by the corroboration work with C/P. Work flow for the formulation is shown in the Figure 2.6.

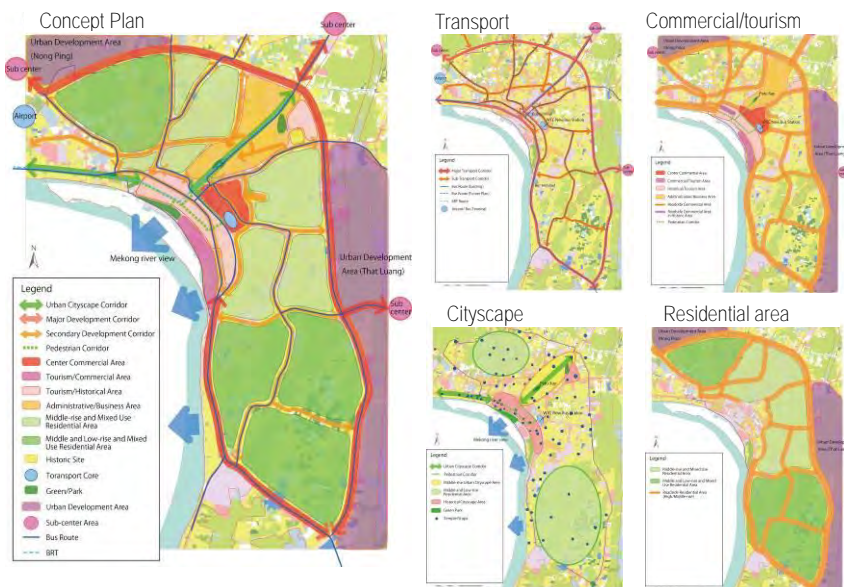


Source: JICA Project Team

Figure 2.6 Work Flow for Formulation of D-LUP and DZC in Inner Zone

For the formulation work, technical meetings were intensively held once a week during assignment time of Japanese experts in charge in order to gradually enhance C/P's understanding on the work.

At the beginning of the formulation work, C/P staffs didn't have concrete vision and future urban image in Inner Zone. For this reason, analysis of existing urban factors and development of concept plan to make consensus for future vision in Inner Zone was conducted as a preparation work for D-LUP and DZC. Developed concept plan and the sector plan area shown in the Figure 2.7.



Source: JICA Project Team

Figure 2.7 Developed Concept Plan of Inner Zone

Draft D-LUP was formulated with examination of characteristics and control policy of zones based on the concept plan. The zone categories and final draft of D-LUP in Inner Zone as of February 2015 are shown in Table 2.5 and Figure 2.8. New ideas of draft D-LUP are as follows;

- New zone categories (10 zones) based on the main usage (commercial, residence, roadside use and historic area) and height control (low-rise, middle-rise and high-rise)
- Designation of area to be particularly considered of promotion or restriction of building height and floor area ratio
- Standardization of width of road side zones (100m or 50m from the center line of frontage road)



Source: JICA Project Team

Figure 2.8 Draft D-LUP in Inner Zone

Table 2.5 Zone Categories of Draft D-LUP in Inner Zone

No.	Name of Zone	Symbol
1	Center Commercial Zone	UA-1
2	Administration and Business zone	UA-2
3	Tourism Zone along Mekong River	UC-1
4	High-rise Road Side Zone	UB-RS1
5	Middle-rise Road Side Zone	UB-RS2
6	Middle-rise Residential Zone	UB-R1
7	Middle and Low-rise Residential Zone	UB-R2
8	Prohibited Zone (Public Preservation)	NE-1
9	Historic-Town Conservation Zone	ZPP-Ua
10	Ancient-Site Conservation Zone	ZPP-Ub

Source: JICA Project Team

Draft D-ZC was developed based on the G-ZC prepared by C/P, zone character and control policy examined in formulation of D-LUP.

Although the draft D-ZC should consist of 15 items in accordance with current regulation, the items were divided into two categories of common items and specific items for the smooth activities. Items with same control covering almost all zones were categorized to common items. Remaining items relating to building usage, BCR, FAR, height, external feature, vacant space and tree planting were categorized to specific items. Contents of common items basically follow draft G-ZC. This activity focused on examination of specific items in consideration of existing situation of building use and instruction of building permission work. The points of development of draft D-ZC are as follows;

- Introduction of new zone characteristics and control policies
- Stipulation of prohibition of building use and special use only in the item of building usage

- Examination of control of building size of factory, warehouse, commercial, assembly hall and hotel to be prohibited
- Introduction of new categories of building use with hazardous material (the categorization is under examination)
- Examination of BCR, FAR and height
- Revising measurement level of building height from ceiling height in current regulation to top of roof
- Application of control of external feature to only administration and business zone (UA-2)
- Examination of control of advertisement in consideration of the current municipal regulation on advertisement
- Application of control of planting space to individual building site with an area of 300 m² or more
- Reduction of control of distance among buildings in a site, and obligation of parking

As outputs for technical transfer of this activity, understanding and capacity related to formulation of D-LUP and DZC were improved as follows;

- Function of D-LUP and D-ZC in urban management
- Formulation process of D-LUP and D-ZC
- Importance of analyzing of urban factors and concept plan, and the formulation method
- Importance of clear stipulation of regulation for building permission work
- Function of specific area to be particularly considered of promotion or restriction
- Designation of zone boundaries to be clear the location

(3) Survey on the Historic Area

In order to consider building code and cityscape control in the Historic Area, we conducted a survey on the existing situation related to the cityscape code; such as, building, information board, and trees.

1) Outline of the Survey

- i) Survey Period: From June to early July in 2014
- ii) Survey Area: Historic Area 190ha
- iii) Survey Contents
In order to eliminate the error difference of a result, survey contents were divided into three types.



Source: JICA Project Team

Figure 2.9 Survey Area

Table 2.6 Survey Contents

Survey type	Survey item
< Survey type A > Building survey	A-1 : Building Stories A-2 : Historic Building A-3 : Building Colors A-4 : Building Material A-5 : Building Uses
< Survey type B > Trees and setback survey	B-1 : Tree B-2 : Setback B-3 : Temple Wall
< Survey type C > Information board survey	C-1 : Stand-alone information board C-2 : Rooftop information board C-3 : Wall information board C-4 : Prominent information board C-5 : Information board at night
< Survey type D > Interview survey	D-1 : Residents D-2 : Business operator D-3 : Tourist

Source: JICA Project Team

iv) Survey Team

For enhancement of C/P's ownership and experience, 4 PTI members and local assistants were paired to conduct the survey.

2) Result of the Survey

As the result of the Interview Survey, it was found that awareness of Historic Area designation and regulation of building construction were significantly low. However, it can be said from the result that interviewees appraised historic atmosphere and cityscape and they recognized necessity of preservation of historic cityscape. In consequence, it was confirmed that awareness raising activities for historic cityscape could be effective in this area.

Table 2.7 Result of the Survey

Survey Type & Items		Outline of Survey Result												
A. Building survey	A-1: Building Stories	<p>Existing height regulation is 12m (about 4 stories). Many buildings having over 4 stories exist in Historic Area. More than 40 buildings are constructed after the French survey issued in 2002.</p> <table border="1"> <caption>French Survey 2002 Data</caption> <thead> <tr> <th>Floor Count</th> <th>Number of Buildings</th> </tr> </thead> <tbody> <tr> <td>5 F</td> <td>18</td> </tr> <tr> <td>6 F</td> <td>48</td> </tr> <tr> <td>7 F</td> <td>9</td> </tr> <tr> <td>8 F</td> <td>6</td> </tr> <tr> <td>8 F <</td> <td>3</td> </tr> </tbody> </table>	Floor Count	Number of Buildings	5 F	18	6 F	48	7 F	9	8 F	6	8 F <	3
Floor Count	Number of Buildings													
5 F	18													
6 F	48													
7 F	9													
8 F	6													
8 F <	3													

Survey Type & Items		Outline of Survey Result						
	A-2: Historic Building	Based on the historic building inventory 2002 supported by French, survey team checked existing condition of historic buildings. More than 30 buildings have been demolished since 2002. Condition of remaining building is not good to maintain its quality.						
			⊙	○	□	△	×	sum
		P1 Exceptional Heritage	23	0	4	5	0	32
		P2 Registered Heritage	79	0	13	2	0	114
		P3 Heritage Monitor	42	3	10	4	2	61
	sum	14	3	27	3	2	207	
		⊙ : Existing as at old (Used) ○ : Existing as at old(Unused or Unknown) □ : repaired △ : broken and/or become a new building stands × : broken and become an open space						
	A-3: Building Colors	No color control regulation exists. So many color noise can be seen everywhere in the area. Strong and bright colors are used for a lot of buildings.						
	A-4: Building Material	Many of newly constructed buildings use mirror type glass or metal material which is not suitable in Historic Area.						
	A-5: Building Uses	Violation of regulation on building use is not seen much in the area. However, change in building use from residential to commercial is proceeding. Land owner or house owner may have been moved out from the area by handed over to commercial operators.						
B. Trees and setback survey	B-1: Tree	Trees in Historic Area were counted. Especially dominant species were counted separately.						
	B-2: Setback	Utilization of setback area along the roads is surveyed. Many of them area used as restaurant, parking space or shop space.						
	B-3: Temple Wall	Location and height of the wall of temples are surveyed.						
C. Advertisement and sign board survey	C-1: Standalone advertisement	Installation of stand-alone advertisement and shop sign are not allowed in the setback area. However, advertisement of large companies can be seen in the area.						
	C-2: Rooftop advertisement	Size of rooftop advertisements was surveyed and photographed. Glare lighting on advertisement board can be seen.						
	C-3: Wall advertisement	Many commercial buildings are covered by large size advertisement. These advertisements are disturbing historic atmosphere.						
	C-4: Wall attached shop sign	This type of sign is attached vertically from the wall. It is not so dominant in this area.						
	C-5 : Advertisement at night	Light emitting advertisements and shop signs of beverage company and mobile company are conspicuous at night. LED monitor advertisements are also dazzling at night.						
D. Interview survey	D-1: Residents	70% of residents answered cityscape had changed much. This means historic cityscape has been spoiled. 80% concerned that high-rise buildings and strong color advertisements were problem. Nearly half of them did not recognize building regulation of Historic Area. 80% felt necessity of cityscape improvement in the area. More than 60% of residents agreed to strengthen cityscape regulation, and more than 80% agreed to participate in the cityscape improvement activities.						
	D-2: Business operators	40% of business operators did not recognize Historic Area. 45% of them did not recognize building regulation. 80% felt necessity of cityscape improvement in the area. More than 60% of residents agreed to strengthen cityscape regulation, and more than 80% agreed to participate in the cityscape improvement activities.						

Survey Type & Items		Outline of Survey Result
	D-3: Tourists	55% of tourists visiting Vientiane were satisfied more than expected. 60% of them answered historic building and wats were remaining at good condition, however only 10% of them felt historic atmosphere of Historic Area. More than half of tourists did not recognize Historic Area.

Source: JICA Project Team

3) Technical Transfer

At first this survey was planned to be implemented by subcontracting. However, in order to strengthen C/P's knowledge and experience in current situation recognition and analysis, the field survey was conducted by PTI staffs and project local staffs.

Technical transfer was practiced through the guidance of implementation method, data analysis and evaluation, and summarizing findings. As a result, PTI staff's involvement was improved and strengthened.

(4) Site Visit and Survey in Luang Prabang

Site visit and survey to Luang Prabang was conducted as a reference of cityscape code in Vientiane Capital. Outline of the survey result is shown below.

1) Survey Outline

Survey period: May 20, 2014 ~ May 23, 2014

Participants:

Leader:	Ms. Phonesavanh PHENGSYDA (PTI)*
Co-leader:	Mr. Tomohiro HASEGAWA (JICA Expert)
PTI:	Mr. Chanthasack BOTTAPHANITH** Mr. Khamphonemisay PHOMMATHATH
DHUP:	Mr. Aphisayadeth INSISIENGMAY Mr. Santana CHOUMMANIVONG
DPWT:	Mr. Loumkham CHANTHAVONGSA
JICA Expert:	Mr. Akifumi WATANABE Mr. Kuniomi HIRANO
Companion:	Mr. Takahiro YAMATO Ms. Thodsakhone RAZMOUNTRY
	*Return to Vientiane on May 22 for urgent task
	** Could not join because of family issue

Survey schedule: As shown in Table 2.9.

Table 2.8 Survey Schedule

Date	Events	Remarks
20 th (Tue)	9:10-: Flight from VTE to LPB	
	13:30-15:00: Interview with DPWT	
	15:00-17:00: Brief Site Visit (Buffer zone)	with DPWT
21 st (Wed)	9:00-10:30: Interview with World Heritage Dept.	
	10:30-12:00: Interview with other organization	
	13:30-17:00: Field Survey (Protected zone)	with World Heritage Dept.
	18:00-: Dinner invited by ViLUCC	with DPWT, Heritage Dept. and others
22 nd	9:00-12:00: Workshop (Discussion Forum for Cityscape)	with DPWT, Heritage

Date	Events	Remarks
(Thu)	Control and Improvement)	Dept. and others
	PM: Meeting of ViLUCC (Review of the Site Visit, application to Cityscape code in Vientiane, TOR of survey)	
23 rd (Fri)	AM: Data collection from DPWT 13:45: Flight from LPB to VTE	

Source: JICA Project Team

2) Survey results

After Luang Prabang was registered as UNESCO World Heritage in 1995, Heritage Preservation and Development Master Plan (800 ha) was prepared for preservation of the World Heritage. The coverage of the plan is same as the area designated as World Heritage. In addition, related regulation was prepared and executed to secure the effect of the Plan.

Since demand of the development in the area outside of the World Heritage is becoming high, based on the instruction of UNESCO World Heritage, Buffer Zone (12,500 ha), outside preservation area, was designated for development control based on "Regulation on Luang Prabang Urban Planning (2012)". This is based on the idea that heritage of Luang Prabang has value together with mountain and rivers. The area that can be obverted from Phousi hill is covered in the Buffer Zone. In addition, bypass road is planned in the Buffer Zone in order to reduce passage transport in the city area.

Development of Preservation Zone (ZPP) is managed by World Heritage Department and development of Buffer Zone is managed by DPWT. Construction Committee was established for management of preservation zone. Application of development which is expected to have a large impact on cityscape (building construction, commercial facility) is discussed and evaluated by the Committee. Usually, 4 to 5 applications are discussed in the Committee every year. Chairperson of the Committee (Vice Governor) approves the permit.

Table 2.9 Management in Luang Prabang

	Preservation Zone (ZPP)	Surrounding Area (Buffer Zone)
Development control	Heritage Preservation and Development Master Plan	Regulation on Luang Prabang Urban Planning (2012)
Responsible agency	World Heritage Office, Ministry of Information and Culture (Small scale) Committee (Large scale, important project)	DPWT Committee (Large scale, important project)

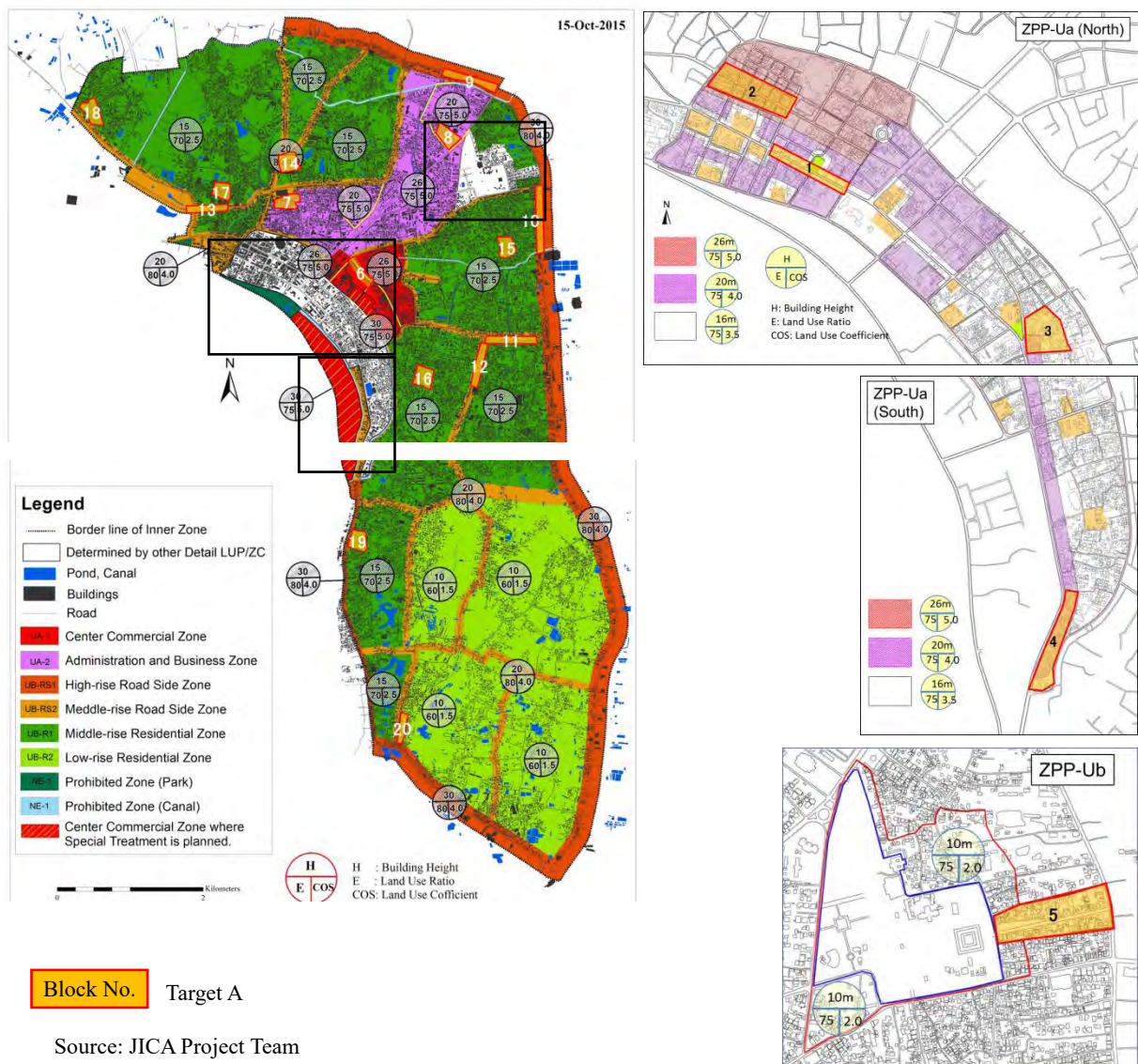
Source: JICA Project Team

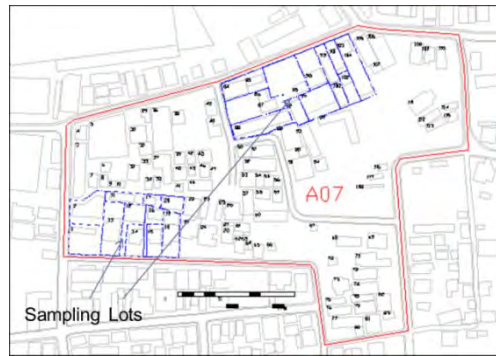
(5) Survey existing buildings which does not conform to draft D-ZC in the Target Zone, and verify draft DZC

For verification of the appropriateness of the designated usage, height, Floor Area Ratio (FAR), Building Coverage Ratio (BCR) in draft D-ZC in the Target Zone, existing building survey to extract non-conformance building was conducted. In addition, the designated control figures in the draft D-ZC were verified by the result of the survey.

1) Survey area

- Target A for survey of building usage, height, FAR and BCR: Sampling lots with a total area of approximately 1.0 ha in each target area, which will be measurable on site survey. 20 Target areas with an area of approximately 5.0ha were selected to cover each zone in draft D-ZC in Inner Zone. Location of Target A and example of sampling lots are shown in the following Table 2.10 and 2.11.
- Target B for survey of height of middle and high-rise buildings along major road in Inner Zone (see Figure 2.11)
- Target C for survey of height of planned buildings in approved large-scale urban development projects in Inner Zone (see Figure 2.11)



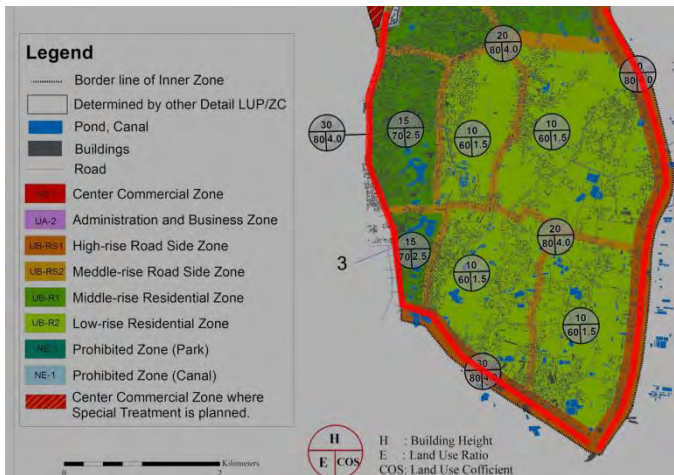


Source: JICA Project Team

Figure 2.11 Example of Sampling Lots in Target A



		Target
Target B	1	T4street
	2	Keysone Phomviane street
	3	Tha Deua street
Target C	4	World Trade Centre
	5	Vientiane Centre
	6	Vientiane New World
	7	Bus terminal redevelopment
	8	Urban redevelopment of Thong Khan Kham Market



— Target B
Area No. Target C

Source: JICA Project Team

Figure 2.12 Target B and C in Inner Zone

2) Survey method and work organization

Survey method consists of site survey, and data development and valuation in GIS. Site survey was conducted for confirmation of building site boundaries, building usage, number of stories, height and wall position. Collected building data was inputted into GIS database,

and building indicators (height, FAR and BCR) were calculated. The detail explanations by each target and control item are shown in the Table 2.10.

Survey work was implemented by survey teams organized with PTI staffs with technical support of JICA project team, and with survey assistants who was hired by JICA project team. The detail explanation of survey organization is shown in the Table 2.11.

Table 2.10 Survey Method

Target	Items	Survey Method
Target A (Usage, FAR, BCR and height)	Area of building site	<ul style="list-style-type: none"> • Confirm each site boundaries on site survey and draw them on survey map • Digitize site boundaries on GIS and calculate site areas
	Building usage	<ul style="list-style-type: none"> • Confirm categories of building usage (residence, commercial and others) on site survey
	BCR	<ul style="list-style-type: none"> • Confirm wall position of each building on site survey and draw them on survey map • Revise building figures on GIS and calculate building area • Calculate BCR of each building using site area and building area
	FAR	<ul style="list-style-type: none"> • Confirm number of stories of each building on site survey and record them on survey map • In case of irregular shapes of building such as smaller area on top of floor, adjust number of stories (Example: 2.5) • Input number of stories of each building on GIS • Calculate FAR of each building using site area, building area and number of stories
	Height	<ul style="list-style-type: none"> • Measure height of each building using laser range finder on site survey • Input height of building on GIS
Target B (Road side building)	Height	<ul style="list-style-type: none"> • Confirm middle and high-rise building which might exceed designated height in draft DZC, and measure height of the building using laser range finder • Input height of building on GIS
Target C (Large-scale urban development)	Height	<ul style="list-style-type: none"> • Confirm height of planned building on approved documents of urban development project

Source: JICA Project Team

Table 2.11 Work Organization for Building Survey

Items	Organization
Survey management	<ul style="list-style-type: none"> • 1 person of PTI • Technical advice from Japanese expert of land use planning of JICA project team
Site survey	<ul style="list-style-type: none"> • 4 teams organized with PTI staffs • 6 survey assistants hired by JICA project team • Technical advice from Japanese expert of land use planning of JICA project team
GIS work	<ul style="list-style-type: none"> • 1 person of PTI • Technical advice from Japanese expert and local expert who was hired by JICA project team

Source: JICA Project Team (d) Re-examine draft DZC

Alternation of control value in draft D-ZC in Inner Zone was discussed with counterpart based on the result of building survey. As the result, each control value of BCR, FAR and height were not revised due to the low rate of the disqualification of existing building. In FAR and height of draft D-ZC, there are enough margin between control value and existing buildings, but these values in draft D-ZC were kept for promotion of high-rise building in

future. In addition, most planned buildings in large-scale urban development project are over the designated height in draft D-ZC.

(6) Draft “Vientiane Capital Governor’s Decision on Urban Management Regulation”

According to the policy of formulating official documents, which was mentioned in 2.2.2 (8), Draft “Vientiane Capital Governor’s Decision on Urban Management Regulation”, which consists of:

- General part including general provisions, such as definitions, and
- D-LUP/ZC of Historic Area and D-LUP/ZC of Inner Zone,

has been formulated with support of the Long Term Expert. And its “Guideline” has been also formulated with support of the Long Term Expert. These results are shown in **Attachment 3** in the style of combination of both regulation and guideline.

Short term experts contributed in drafting land use regulation on:

- factories and
- facilities keeping hazardous materials,

which is a part of above documents.

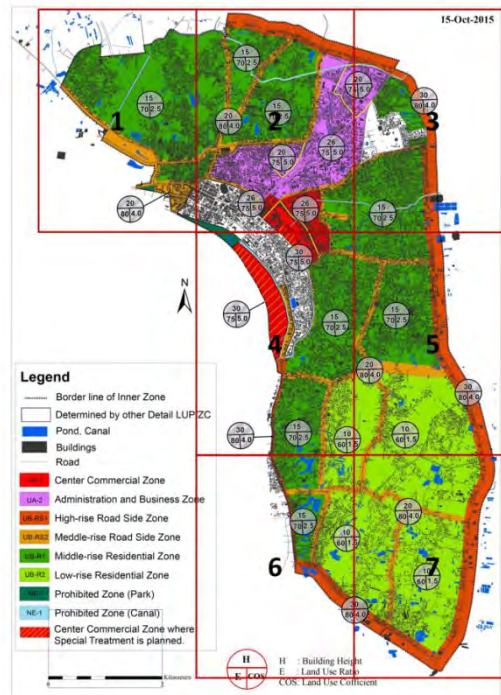
(7) Follow up of the approval procedure of D-LUP/ZC

Draft “Ministerial Order on Construction Management Regulation” (**Attachment 2**), which provides new permission systems, countermeasures against violations, etc., is expected to be issued by the Minister of MPWT. And its Draft Guideline (included in **Attachment 2**) is expected to be published by the Director General of DHUP.

Draft “Vientiane Capital Governor’s Decision on Urban Management Regulation” (**Attachment 3**), which provides general provisions, and D-LUP of Historic Area and D-LUP/ZC of Inner Zone, is expected to be issued by the Governor of Vientiane Capital. And its Draft Guideline (included in **Attachment 3**) is expected to be published by the Director General of DPWT.

Both Drafts (**Attachment 2** and **Attachment 3**) have been modified in the style of legal document, and are still under procedure toward enforcement.

For the documentation, JICA project team prepared official map of D-LUP of Inner Zone with scale of 1/5,000.



Source: JICA Project Team

Figure 2.13 Official Maps for Detail LUP of Inner Zone (7 maps with scale of 1/5,000)

2.4.3 Results of Achievement of Technical Transfer

As the achievement of technical transfer, following understanding and capacity for formulation of D-LUP/ZC were enhanced, through a series of discussion, which was held as shown in the table below.

- Role of D-LUP/ZC in urban management (Promotion and control of urban development)
- Formulation method for D-LUP/ZC
- Importance of clear regulation for appropriate inspection in building permission work.
- Survey method for non-conformed building
- Purpose and appropriate requirements on 15 items, including
 1. Development/Preservation Policy of the Zone
 2. Land Use
 3. Technical Network
 4. Road and Gateway
 5. Characteristic of Site
 6. Distance from Site Boundary
 7. Distance among Buildings in a Site
 8. Road, Reservation Area, and Structure
 9. Building Height (H)
 10. Land Use Ratio (E)
 11. Land Use Coefficient (COS)
 12. External Feature
 13. Parking lot
 14. Vacant Space and Tree Planting
 15. Special Treatment

Table 2.12 Schedule of Discussion

Month	Date		
	Year of 2014	Year of 2015	Year of 2016
January			12, 19, 28
February			9
March		3, 6	29
April	4		6, 21, 26
May	7, 13, 24, 29	10, 29	6, 9, 11, 31
June	3, 13, 17, 23	9, 16, 30	7, 14, 28
July	25, 29	8	5, 12, 26
August	1, 4, 6, 18, 22	4, 18	2, 9, 16, 23, 30
September	2, 9, 16, 25	1, 22, 24	1, 13, 19, 27
October	27	8, 14, 26	
November	25	10, 17, 23	
December	16	7, 15	

Source: JICA Project Team

2.5 Reference Materials for Enforcement of New Systems and Regulations

2.5.1 Objectives

Outputs of the technical transfer, the activities and the indicator are as follows (quotation from PDM);

- Output:
 4. Capacity on urban development control will be enhanced (focusing on Historic Area).
- Activities:
 - 4-1. To disseminate approved LUP and ZC (including Cityscape Code) to the residents in Historic Area through several methods.
 - 4-2. To make/improve manual for application of LUP and ZC (including Cityscape Code) in Historic Area.
 - 4-3. To apply LUP and ZC (including Cityscape Code) in Historic Area.
 - 4-4. To conduct training to staff related to urban development planning on application of LUP and ZC (including Cityscape Code) in Historic Area.
- Indicator:
 - 4-1. Manual for monitoring and enforcement works.
 - 4-2. One dissemination seminar.
 - 4-3. Monitoring /enforcement activities

2.5.2 Activities and Outputs of Technical Transfer

As mentioned in 2.4.2 (5),

- Draft “Ministerial Order on Construction Management Regulation” and its Guideline (Attachment 2), and
- Draft “Vientiane Capital Governor’s Decision on Urban Management Regulation” (Attachment 3),

are still under procedure for approval.

Therefore,

- - Regarding 4-1, approval of LUP and ZC is not yet done.
- - Regarding 4-3, enforcement of LUP and ZC does not start yet.
- - Regarding 4-4, it will be done after approval of LUP and ZC.

On the other hand, in order to prepare the enforcement, the Project formulated reference documents as shown below.

(1) Planning Manual on D-LUP/ZC

In the activities of formulation of D-LUP/ZC in phase 1 and 2, the step by step plan formulation methods were prepared as training materials. Planning Manual was prepared based on training materials. In addition, public engagement and GIS were added to the manual.

Regarding training for D-LUP/ZC, the trainees are expected to be assigned from counterpart staffs related agencies such as PTI and DPWT who did not join the project activities.

(2) Operation Manual on LUP/ZC

A set of Attachment 2 and Attachment 3 is a draft of Operation Manual on LUP/ZC. Completed Manual will be compiled after approval of LUP/ZC because legal statement in approved LUP/ZC will be somewhat different from a set of Attachment 2 and Attachment 3.

(3) Building Design Reference Book

Building Design Reference Book was compiled as “reference” for cityscape improvement in the Historic Area, which is designed as supplement materials to cityscape code or D-ZC in Historic Area of City Wall (190 ha) and Historic Area of Thatluang (60 ha). Reference Book shows the classification of historic buildings and details on building features that are recommended.

(4) Brochure

Brochure was compiled to show the outcome of the Project including urban development management, General Land Use Plan, Construction, Detail Land Use Plan and Zoning Code, important definition, advertisement and sign

2.5.3 Achievement of Technical Transfer

As the achievement of technical transfer, capacity to make reference documents and capacity for Urban Development Control Management were enhanced, through a series of discussion, which was held as shown in the table below.

Table 2.13 Schedule of Discussion

Month	Date		
	Year of 2014	Year of 2015	Year of 2016
January			12, 19, 28
February			9
March		3, 6	29
April	4		6, 21, 26
May	7, 13, 24, 29	10, 29	6, 9, 11, 31
June	3, 13, 17, 23	9, 16, 30	7, 14, 28
July	25, 29	8	5, 12, 26
August	1, 4, 6, 18, 22	4, 18	2, 9, 16, 23, 30
September	2, 9, 16, 25	1, 22, 24	1, 13, 19, 27

Month	Date		
	Year of 2014	Year of 2015	Year of 2016
October	27	8, 14, 26	
November	25	10, 17, 23	
December	16	7, 15	

Source: JICA Project Team

2.6 Pilot Project (related to Cityscape Improvement)

2.6.1 Outline of Pilot Project

(1) Objectives of Activities (Expectation of Output)

Expected output and activities are as follows;

- 5 Output: Capacity on implementing cityscape projects will be enhanced through pilot project (focus on activities for cityscape in Historic Area).
- Activities
 - 5-1. To identify/select objectives of pilot project.
 - 5-2. To design the pilot project.
 - 5-3. To implement the pilot project.
 - 5-4. To conduct training on implementation of urban-environment-upgrading projects through pilot project.

Pilot project is composed of soft component and hard components. Soft components, composed of workshop and trial event, are considered as continuation of Phase 1 activity with more focus on stakeholder involvement, particularly villages and university. In addition, guide plates were set in the Historic Area to show information of the Historic Area. Physical component, which was not conducted in Phase 1, was implemented in Phase 2 after discussion with JICA and Lao side.

(2) Outline of Activities and Technical Transfer

Results of the pilot project which consists mainly of “(1) Workshop”, “(2) Trial Event”, and “(3) Physical Component” are shown as following Sections 2.6.2 and 2.6.3 separately.

2.6.2 Workshop

Workshop was conducted in Phase 1 and Phase 2. Outline of workshop is shown below.

(1) Outline of Workshop in Phase 1

(i) Objectives of the Workshop

Four workshops, in total, were organized as a part of the first year pilot project. The purpose is to enhance understanding of cityscape refining activities. It also intended to collect opinions before and after the event entitled as “Vientiane Trial”, which was also organized as a part of the pilot project.

(ii) Target of the Workshop Participant

The target of the workshop participant is officials from C/P organizations, officials from local government, entrepreneurs and locals living in the area where the event takes place. In

addition, students and professors from Department of Architecture, National University of Laos had participated in supporting preparation and operation of the workshop.

(iii) Content of the Workshop

The three workshops were held right before the event. The duration of the time of a workshop limited around two hours and half; the first half part as lecture by experts and the latter of the part as group discussion among participants. The fourth workshop was held right after the event for collecting opinions on the event and suggestions for the further activities. The contents in each workshop are summarized in Table 2.15.

Table 2.14 Summary of 4 Days Workshop

Day	Content
Day 1	<ul style="list-style-type: none"> ○ Explanation of the event, question and answer on the event ○ Lecture by experts <ul style="list-style-type: none"> - Case study on the historic area management in Japan
Day 2	<ul style="list-style-type: none"> ○ Lecture by experts <ul style="list-style-type: none"> History on the cityscape refining activities in France Case study on the cityscape refining activities in Thailand Historical monument in Vientiane Capital ○ Group discussion among participants <ul style="list-style-type: none"> All 25 participants in which comprised of entrepreneurs and residents in the target area for the event were divided into 6 groups. Each group was given the specific theme and the participants in a group walked on the streets in the target area of the event. After having discussion in a group, the representative of each group presented the opinion on the given theme. The theme given to the groups are as follows; <ul style="list-style-type: none"> “Cityscape to be protected” suggested by the viewpoint of entrepreneur “Cityscape to be protected” suggested by the viewpoint of residents “Bad cityscape” suggested by the viewpoint of entrepreneur “Bad cityscape” suggested by the viewpoint of residents “Cityscape to be improved by the view point of entrepreneur “Cityscape to be improved by the view point of residents
Day 3	<ul style="list-style-type: none"> ○ Lecture by experts <ul style="list-style-type: none"> Case study on the cityscape control in the area of world heritage site of Luang Pabang History on the cityscape of Vientiane Capital Guidance on the cityscape control ○ Group discussion <ul style="list-style-type: none"> The participants developed the measure to protect or improve cityscape based on the outcomes from the previous workshop and considered responsible parties for each measure through discussion in the group formulated from previous workshop. The result of the discussion was presented by the representative from each group. ○ Collection of opinions on the content of the Day 3 workshop and suggestions for the further activities of cityscape improvement
Day 4	<ul style="list-style-type: none"> ○ Collection of opinions on the event, suggestions for further improvement of the event and opinions on the institutional arrangement for cityscape improvement

Source: JICA Project Team

There were many positive opinions on the buildings designed with traditional Lao style as well as colonial style. It was confirmed that quite a few participants pointed out the signboards, plant pots, stalls occupied in pedestrian way as a disturbing view. Many participants raised the opinions on the spider web-like electricity distribution line and telephone line as the cityscape need to be improved. In addition, there were many negative

opinions on the waste management on the public road and sewage pipe, which was not properly connected to the underground drainage.

(2) Objectives of a Focused Meeting and Workshop in Phase 2

It was concluded at the end of the Phase 1 that consideration shall be given for more private and community involvement in the Phase 2. Accordingly, enhancement of private and community initiatives has been the center issue to promote public awareness on cityscape improvement in the Phase 2.

In this context, the method of workshop in the Phase 1 was reviewed and revised as follows;

- Shifting the management of the workshop from JICA project team to local stakeholder, National University of Laos (NUOL)
→ Shifting the management to NUOL enables to grasp more detailed needs from local community
- (in addition to workshop) Organizing a small scale meeting (focused meeting) comprised of village authorities, business operators and residents in the villages located within the trial event area in order to discuss a content and management method of the trial event and to plan further activities after the trial event
→ Active involvement of the representatives from local community helps reflecting the opinions from local community on the management of the trial event and it facilitates disseminating the information on the trial event to local community through the representatives.

Since October, 2015, a series of workshop and focused meeting have been carried out. The summary of these two meetings are shown as Table 2.16.

Table 2.15 Summary of Focused Meeting and Workshop

Items	Focused Meeting	Workshop
Type and Scale	Small Group (10 persons)	Large Group (30-40 persons)
Style	Free Discussion	Sharing Information
Participants	Village Authorities Business Operators and Residents in the area where the trial event take place	Stakeholders in the Target Area (Government Authorities at central, district and village level), Business Operators and Residents in the area where the trial event take place)
Purpose	<ul style="list-style-type: none"> • Discuss a plan of Vientiane Trial 2016 and a method how to continue the event for future • Discuss a method how to make attractive cityscape, including construction works 	<ul style="list-style-type: none"> • Learn and exchange opinion about how to make attractive cityscape • Share information of the plan of Vientiane Trial 2016 and construction works
Frequency and Schedule	7 times (Once a month) Oct, Nov, Dec, Jan, Feb, Apr, May	4 times Oct, Dec, Feb, May

Source: JICA Project Team

(3) Result of the Focused Meeting and Workshop

(i) Focused Meeting

It has been purposed to organize for enhancing more initiative to local community as a decision maker on the upcoming trail event and further activities after the event. In total of 7 meetings have been planned to be organized during the Phase 2 period.

The member of the meeting was selected among the participants from Vat Chan Village and Mixay Village at the 1st workshop carried out on 7 October, 2015. About 6 persons in each village have been chosen as the member.

Five meetings have been already organized between October 2015 and February 2016. In the 1st and 2nd meeting, participants were divided village wise, one group for Vat Chan Village and the other for Mixay Village. In the 3rd meeting, participants were divided depends on the allocated tasks of the trial event, one group for event activity preparation and the other group for event site preparation. In the 3rd and 4th meetings, all participants were discussed in one group for finalizing the event preparation. In the case of participants divided into two groups, one or two professors from NUOL were deployed as mediators in each group.

So far, the main topic of the meeting has been focused on the preparation of the trail event 2016. The summary of the focused meetings is shown in Table 2.15. Photos at the workshop were shown in Figure 2.14.

Table 2.16 Content of Focused Meeting

	Date	Location	Participants (Number)	Content
1 st meeting	14 October, 2015	Wat Onteu	Wat Chan Village (5) Mixay Village (4)	<ul style="list-style-type: none"> • Suggestions on the method and management for the upcoming trail event based on the experience of the trail event 2015 • Selection for the event organizing committee members
2 nd meeting	11 November, 2015	Wat Chan Village Administration Office	Wat Chan Village (3) Mixay Village (11)	<ul style="list-style-type: none"> • Demarcation of role and responsibility of the event organizing committee
3 rd meeting	21 December, 2015	Mixay Village Temple	Wat Chan Village (4) Mixay Village (6)	<ul style="list-style-type: none"> • Itemizing the necessary tasks in each event organizing sub-committee (Security sub-committee, site management sub-committee etc)
4 th meeting	3 February, 2016 (as for the meeting in January, 2016)	Wat Onteu	Wat Chan Village (5) Mixay Village (6)	<ul style="list-style-type: none"> • Final preparation on the event
5 th meeting	26 February, 2016	Wat Onteu	Wat Chan Village (6) Mixay Village (9)	<ul style="list-style-type: none"> • Final preparation on the event • Sharing the progress of physical component

Source: JICA Project Team



Source: JICA Project Team



Figure 2.14 3rd Workshop

(ii) Workshop

It has been purposed to organize for sharing information on the trial event, the physical component and further activities on the cityscape improvement in the Historic Area among stakeholders including Government authorities such as DHUP, DPWT, MICT, Office of Public Work and transportation in Sisattanak District and Chanthabury District, villages heads in the Historic Area, NUOL and business operators in the trial event area. In total of 4 workshops have been planned to be organized during the Phase 2 period.

Three workshops have been organized since October 2015. The summary of the workshops is shown in Table 2.17. Photos at the focused meetings are shown in Figure 2.15.

Table 2.17 Content of Workshop

	Date	Location	Participants (Number)	Content
1 st workshop	7 October, 2015	Wat Onteu	Government authorities (10) Village authorities in Historic Area (9) Business operators (27)	<ul style="list-style-type: none"> • Outcome from the trial event 2015 • Presentation on the Pilot Project 2016 (soft component: Vientiane Trial and physical component: construction works for improving cityscape) • Selection for the member of focused meeting
2 nd workshop	21 December, 2015	Wat Onteu	Government authorities (8) Village authorities in Historic Area (4) Business operators (10)	<ul style="list-style-type: none"> • Information on the progress of trial event preparation • Information on the progress of physical component
3 rd workshop	16 February, 2015	Wat Onteu	Government authorities (14) Village authorities in Historic Area (8) Business operators (22) Residents (11) Media (8)	<ul style="list-style-type: none"> • Information on the progress of trial event • Information on the progress of physical component



Source: JICA Project Team

Figure 2.15 1st Focused Meeting and 3rd Focused Meeting

(4) Evaluation and Recommendation for the Upcoming Workshop and Focus Meetings

(i) Evaluation

Good point

- Public involvement such as workshops and focused meetings from the early stage of event preparation greatly helped to build consensus on the trial event among stakeholders.
- Organizing the series of focused meeting in monthly basis gave the members of the meeting a consciousness of taking a part of the event preparation.

Need to be Improved Point

- Throughout the focused meeting, lively discussion has been done among all participants and many ideas, suggestions and opinions were raised on the trial event. However, most of those comments could not expand to the action initiated by local community. Grass-root approach such as NUOL dispatch students to the targeted community to work together with local community constantly could have been applied to enhance local community's initiatives.

(ii) Recommendations

- The know-how accumulated during the process of the event preparation such as documentation on obtaining an approval for the road blocking, requesting sponsorship for private sector shall be shared with village authorities.
- The sustainability of the cityscape improvement activities shall be discussed among the members in the rest of focused meeting series and come up with solid plan such as establishing the committee for cityscape improvement.

2.6.3 The Trial Event

(1) Concept Setting and Planning of the Trial Event in 2015

Regarding the trial event in the pilot project, the final goal aims at preservation of traditional and historic heritages, which still remain in the Historic Area (such as temples and colonial buildings), the trial event has purposes of succession of these heritages to the next generations, and utilization these heritages to make more attractive cityscape both for tourists and locals. Through the trial event titled as “Vientiane’s Trial 2015 (Historic Town Renovation)”, it is expected to promote deeper understating of tourists and locals on historic town value and

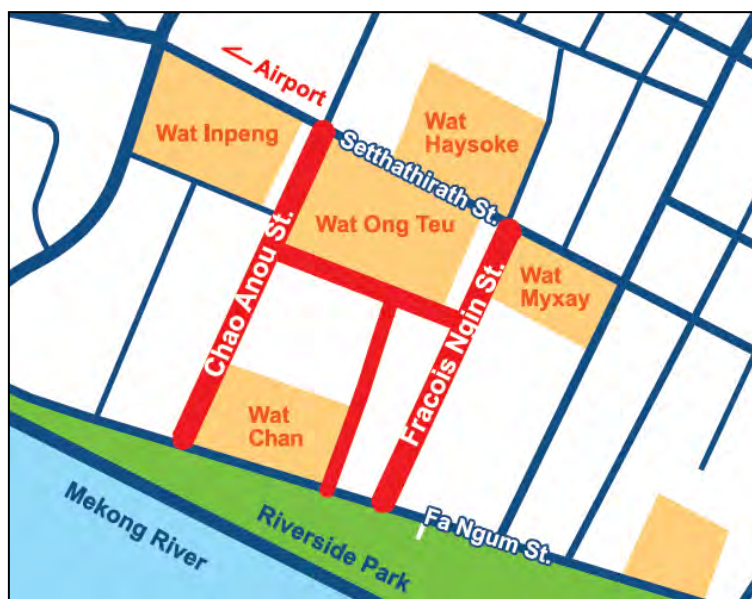
cityscape necessity and to be the first step of the community-based activities for cityscape improvement.

In regard with the objectives of the pilot project, concept setting and contents planning of the trial event were done through discussions and negotiations with the counterparts and stakeholders thoughtfully. Discussed concepts and plans of the trial event are as follows;

Table 2.18 Concepts and Plans of Trial Event

Items	Contents	
Background	<ul style="list-style-type: none"> • Vientiane is an international gateway of Laos as the Capital city. Vientiane is the identity and pride of Laos. • Vientiane has its old history and attractive heritages especially in the historic town area. • Vientiane can attract more tourists and locals by doing cityscape renovation as historic tourism development. • We just try first through this pilot project • The trials seem good, and we can go forward. 	
Concept	<ul style="list-style-type: none"> • We are willing to accommodate a lot of visitors (tourists and locals) during the trial event, but over-crowded, noisy, gaudy (colorful) situation must be avoided. • We intend to improve “satisfaction of visitors” rather than “the number of visitors”. • We respect the keywords of “satisfaction”, “high-quality”, “relax”, “calm”, “beauty”, “something new”, “interesting”, and so on. 	
Outline	Why	Vientiane can attract more tourists and locals by doing cityscape renovation as historic tourism development with good use of our historical heritages.
	Where	In the “Historic Area” of Vientiane. Some streets (or areas) will be selected as a target of the pilot project.
	What	Creating attractive cityscape and street spaces for tourists and locals Taking a step forward with stakeholders as a trial
	When	“Vientiane Trial 2015”: 1st Season in January 2015 “Vientiane Trial 2016”: 2nd Season in January 2016
	How	Firstly conducting “Trial” in experimental period If the trial is acceptable and effective, it shall be implemented actually.
	Who	Local Authorities, Ministries, JICA Project Team, and other relevant organizations will be main implementation bodies. Participations and cooperation of business operators and residents in the target area are necessary.
Main Menu	<ul style="list-style-type: none"> • Photo and Drawing Competitions titled as “Vientiane’s History and Traditional Culture” • Car Free Street (17:00-21:30) • Street Performances • Exhibition of Art Objects, Photos, Drawings and Local Products • Historic Town Waling Tour • Illumination Event 	

Source: JICA Project Team



Source: Lao Sketch (Sub-contractor)

Figure 2.16 Target Area of the Trial Event (Four Streets)

(2) Preparation and Coordination Works for Implementation in 2015

As preparations of the trial event, the first discussion has launched in JCC 2 Meeting on 3rd June 2014 (Tue). Afterwards, many discussions were done in the meetings. The meeting records whose agenda include the trial event are as shown in the following table.

Table 2.19 Meeting Records regarding the Trial Event

Name of Meeting	Date	Discussion Points
JCC Meeting	2014/Jun/3	Basic Policy and Concept of the Pilot Project
Technical WG	2014/Sep/9	Concept and Outline of the Pilot Project
Technical WG	2014/Sep/24	Main Contents of the Pilot Project
Stakeholder Meeting	2014/Oct/2	Concept and Main Contents of the Pilot Project
Expanded Technical WG	2014/Oct/28	Implementation Plan and Method of the Pilot Project
Stakeholder Meeting (Historic Area)	2014/Oct/31	Implementation Plan and Method of the Pilot Project
JCC Meeting	2014/Nov/13	Final Check of the Implementation of Pilot Project
Technical WG	2014/Dec/16	Preparation Progress Report of the Pilot Project
1 st Workshop	2015/Jan/22	(in the previous section)
2 nd Workshop	2015/Jan/27	(in the previous section)
3 rd Workshop	2015/Jan/29	(in the previous section)
4 th Workshop	2015/Feb/18	(in the previous section)

Source: JICA Project Team

Through the main meetings mentioned above and a lot of individual meetings, the implementation organizations were set as the following table. Needless to say, local residents and business operators are the most important implementation players of the trial event.

The Embassy of Japan gave a great cooperation to the trial event. That is “JENESYS2.0” Program which invites five awarded high school and university students to Japan as social community training for 2 weeks.

Table 2.20 Implementation Organization of the Trial Event

Main Organizations	Sponsors
<ul style="list-style-type: none"> • Vientiane Capital & DPWT • Chanthabuly District • Mixai Village & Watchan Village • PTI (Ministry of Public Works and Transport) • DHUP (Ministry of Public Works and Transport) • Ministry of Information, Culture and Tourism • National University of Laos • National Institute of Fine Art of Laos • Embassy of France • Embassy of Japan 	<ul style="list-style-type: none"> • Lao Brewery Company • Lao Sketch • Innogreen • TOH LAO

Source: JICA Project Team

Initially the Project Team intended the Trial Event to hold trial event from 24th January (Sat.) to 1st February (Sun.) for nine days (4 weekends and 5 weekdays). However, delay in getting traffic regulation permission caused postpone of the event date one week. Additionally strong opposition of some restaurant owners made the initial date to shorten from 9 days to 4 days, skipping 5 weekdays. According to such condition changing, the event date was finalized as 31st January (Sat.), 1st February (Sun.), 7th (Sat.) and 8th (Sun.) for four days (no weekdays).

During the trial event, making Car Free Street was proposed in the night time to provide attractive public space for pedestrians on the streets whose spaces are dominated by passing and parking cars usually. On the car free streets, a variety of activities, such as art exhibitions and traditional performances, was proposed in collaboration with National University of Laos (Faculty of Architecture) and National Institute of Fine Art. To promote understandings and cooperation of local residents and business operators, public involvement process was applied through having a series of workshops.

As preparation works, brochures, posters and banners were provided to appeal the trial event. Additionally advertisements were put on Lao Sketch (Japanese Magazine) and main three newspapers.

Table 2.21 Prepared Brochures, Posters and Banners for Appealing the Trial Event

Type	Language	Size	No. of Copies
Brochure (paper)	Eng	A4 4 page	2,000
	Lao	A4 4 page	2,000
Poster (vinyl)	Eng	A3 size	200
	Lao	A3 size	200
	Jpn	A3 size	50
Banner (vinyl)	Eng & Lao	A1 size	50
	Eng & Lao	(1m * 3m)	10

Source: JICA Project Team



Source: JICA Project Team

Figure 2.17 Brochures of the Trial Event (Left: Japanese, Right: English Ver.)

To avoid the problem by the traffic restriction, parking spaces were provided with 120 for cars and 200 for motorcycles in the site of temples surrounding the target area. For safety reason, two doctors were standby in the target area during the event. Many garbage boxes were also prepared to set in the target area.

(3) Result of the Trial Event in 2015

Without any serious confusions, accidents, and troubles, four days trial event completed.

On 30th January (Fri.), the day before the trial event, an Opening Ceremony was held attended by Vice Governor of Vientiane, Vice Minister of MPWT, Ambassador of Japan, Representative of Embassy of France, and Chief Representative of JICA Laos Office. In the ceremony total 22 awarded persons of photo and drawing competitions titled as History and Traditional Culture of Vientiane were commended by presenters mentioned above.

Thanks to cooperation of the traffic police from the district and villages, serious problems and confusions were not appeared regarding traffic regulation.

Public awareness about Historic Area and cityscape improvement, which is one of the most important purposes of the trial event, was completed as our expectation through guide panels of Historic Area set by National University of Laos, Historic Area walking tour guided by students, brochures distributing to visitors, photo and drawing competitions, etc.



Award of Drawing Competition (Opening Ceremony)



Opening Ceremony



Art Object at Entrance of Car Free Street



Decoration Gate of Car Free Street



Streetscape with Many Visitors



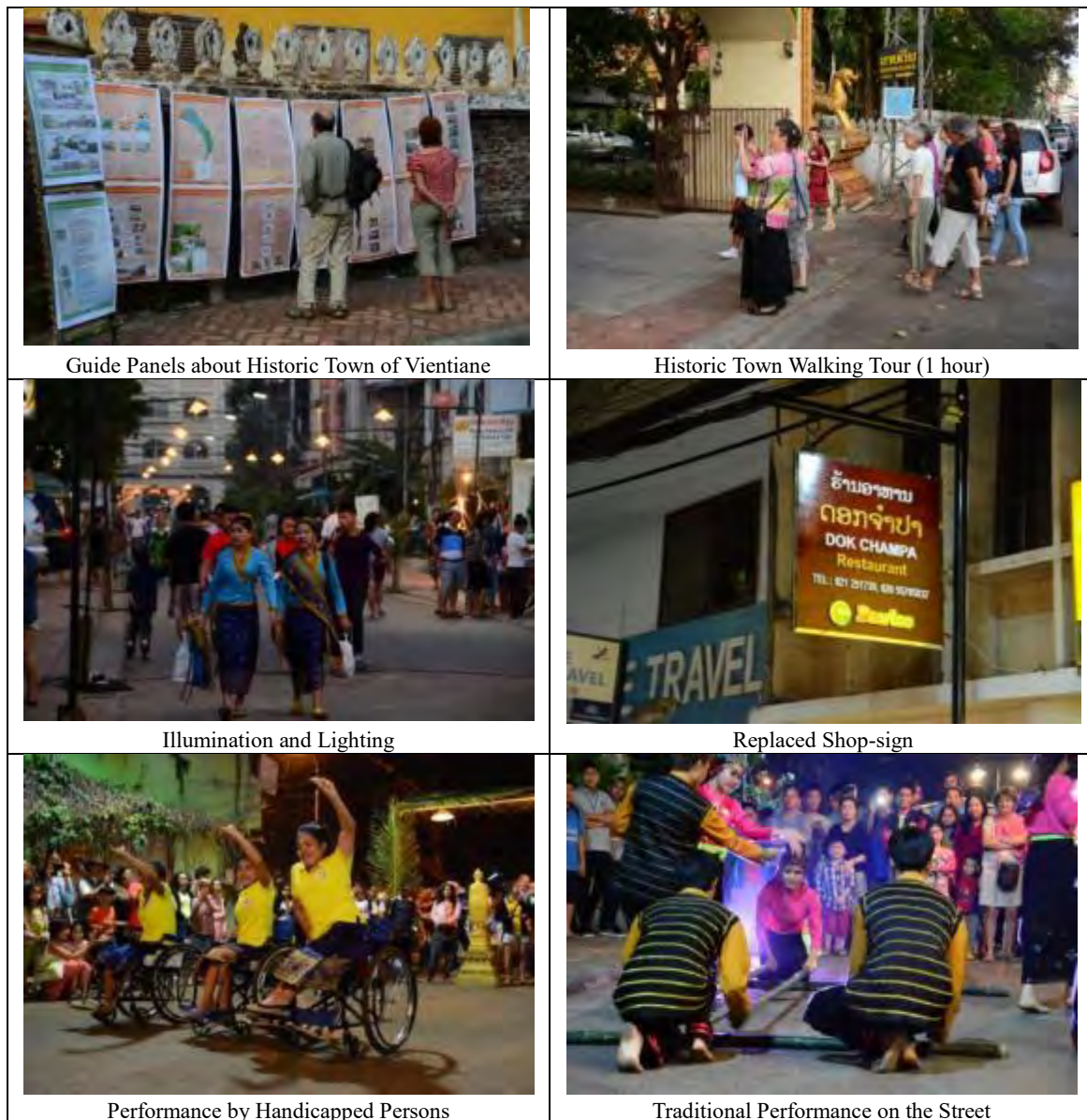
Traditional Performance on the Street



Handicapped Persons



Exhibition Booths of National University of Laos



Source: JICA Project Team

Figure 2.18 Picture Album of the Trial Event

(4) Concept Setting and Planning of the Trial Event in 2016

In the first phase of the Project, the Trial Event, namely “Vientiane’s Trial 2015 -Historic Town Renovation-” was conducted in 31st January 2015 (Sat), 1st February (Sun), 7th (Sat), and 8th (Sun) for four (4) days in total, without any accidents and with good reputations. The trial event in Phase 2 was proposed as the continuous event of phase 1.

The goal of the trial event aims at preservation of traditional and historic heritages, which still remain in the Historic Area (such as temples and colonial buildings), the trial event has purposes of succession of these heritages to the next generations, and utilization these heritages to make more attractive cityscape both for tourists and locals. Through the trial event titled as “Vientiane’s Trial 2016 (Historic Town Renovation)”, it is expected to promote deeper

understating of tourists and locals on historic town value and cityscape necessity and to be the first step of the community-based activities for cityscape improvement.

Through the preparation works of 2016, the following three (3) points were taken into account with C/P and other relevant players.

- Transferring initiatives of arrangement and implementation work more to Lao side (counterparts, local authorities, and universities),
- Promoting participations of event activities more from business operators and local people, and
- Collecting event cost more from business operators, sponsors and other donors (not only from JICA Project Team)

In regard to the objectives of the pilot project, concept setting and contents planning of the trial event of 2016 were done through discussions and negotiations with the counterparts and stakeholders thoughtfully. Discussed concepts and plans of the trial event 2016 are as follows;

Table 2.22 Concepts and Plans of Trial Event 2016

Items	Contents	
Background	<ul style="list-style-type: none"> • Vientiane is an international gateway of Laos as the Capital city. Vientiane is the identity and pride of Laos. • Vientiane has its old history and attractive heritages especially in the historic town area. • Vientiane can attract more tourists and locals by doing cityscape renovation as historic tourism development. • We just try first through this pilot project. • The trials seem good, and we can go forward. 	
Concept	<ul style="list-style-type: none"> • We are willing to accommodate a lot of visitors (tourists and locals) during the trial event, but over-crowded, noisy, gaudy (colorful) situation must be avoided. • We intend to improve “satisfaction of visitors” rather than “the number of visitors”. • We respect the keywords of “satisfaction”, “high-quality”, “relax”, “calm”, “beauty”, “something new”, “interesting”, and so on. • We cooperate with construction works which have been conducting in parallel (matching of target area, information and opinion exchange with local people, linkage with cityscape regulations to be introduced, etc.) 	
Strengthen Points 2016	<ul style="list-style-type: none"> • Transferring initiatives of arrangement and implementation work more to Lao side (counterparts, local authorities, and universities), • Promoting participations of event activities more from business operators and local people, • Collecting event cost more from business operators, sponsors and other donors (not only from JICA Project Team) 	
Outline	Why	Vientiane can attract more tourists and locals by doing cityscape renovation as historic tourism development with good use of our historical heritages.
	Where	In the “Historic Area” of Vientiane. Some streets (or areas) will be selected as a target of the pilot project.
	What	Creating attractive cityscape and street spaces for tourists and locals Taking a step forward with stakeholders as a trial
	When	“Vientiane Trial 2015”: 1st Season in January 2015 “Vientiane Trial 2016”: 2nd Season in February 2016
	How	Firstly conducting “Trial” in experimental period If the trial is acceptable and effective, it shall be implemented actually.
	Who	Local Authorities, Ministries, National University of Laos, JICA Project Team, and other relevant organizations will be main implementation bodies. Participations and cooperation of business operators and residents in the target area are necessary.

Items	Contents
Main Menu	<ul style="list-style-type: none"> • Drawing Competitions titled as “Vientiane’s History and Traditional Culture” • Car Free Street (17:00-21:00) • Street Performances • Exhibition of Art Objects, Photos, Drawings and Local Products • Historic Town Waling Tour • Illumination Event

Source: JICA Project Team

(5) Preparation and Coordination Works for Implementation in 2016

As preparations of the trial event, the trial event was approved in JCC 5th Meeting on 18th December 2015 (Fri). Before and after, many discussions were done in the workshops which described in the next session. The meeting records whose agenda include the trial event are as shown in the following table.

Table 2.23 Meeting Records regarding the Trial Event

Name of Meeting	Date	Discussion Points
1 st Workshop	2015/Oct/7	Presentation on the Pilot Project 2016
1 st Focused Meeting	2015/Oct/14	Suggestions on the method and management
2 nd Focused Meeting	2015/Nov/11	Role and responsibility of the event organizing committee
Stakeholder Meeting	2015/Dec/8	Presentation on the Pilot Project 2016
JCC Meeting (5th)	2015/Dec/18	Final Approval of the Implementation of Pilot Project
2 nd Workshop	2015/Dec/21	Information on the progress of trial event preparation
3 rd Focused Meeting	2015/Dec/21	Itemizing the necessary tasks in sub-committee
4 th Focused Meeting	2016/Feb/3	Final preparation on the event
3 rd Workshop	2016/Feb/16	Information on the progress of trail event
5 th Focused Meeting	2016/Feb/26	Final preparation on the event

Source: JICA Project Team

Through the main meetings mentioned above and a lot of individual meetings with C/P, the implementation organizations were set as the following table. Local residents and business operators are the most important implementation players of the trial event.

Table 2.24 Implementation Organization of the Trial Event

Main Organizations	Premium Sponsors
<ul style="list-style-type: none"> • Vientiane Capital & DPWT • Chanthabuly District • Mixai Village & Watchan Village • PTI (Ministry of Public Works and Transport) • DHUP (Ministry of Public Works and Transport) • Ministry of Information, Culture and Tourism • National University of Laos • National Institute of Fine Art of Laos 	<ul style="list-style-type: none"> • Lao Brewery Company • EDL (Electricite Du Laos) • MMG (Lanexane Mineral)

Source: JICA Project Team

In 2015, the Project Team faced to the problem for setting the event date due to delay in getting traffic regulation permission caused postpone of the event date one week. According to the lesson from it, permission procedure was done ahead.

During the trial event, making Car Free Street was proposed in the night time to provide attractive public space for pedestrians on the streets whose spaces are dominated by passing and parking cars usually. On the car free streets, a variety of activities, such as art exhibitions and traditional performances, was proposed in collaboration with National University of Laos (Faculty of Architecture) and National Institute of Fine Art. To promote understandings and cooperation of local residents and business operators, public involvement process was applied through having a series of workshops.

As preparation works, brochures, posters and banners were provided to appeal the trial event. Additionally advertisements were put on main two (2) newspapers.

Table 2.25 Prepared Brochures, Posters and Banners for Appealing the Trial Event

Type	Language	Size	No. of Copies
Flyer (paper)	Eng	A5 2 page	4,000
	Lao	A5 2 page	4,000
Brochure (paper)	Eng	A5 4 page	3,000
	Lao	A5 4 page	3,000
Poster (vinyl)	Eng & Lao	A2 size	200
Banner (vinyl)	Eng & Lao	A1 size	20
	Eng & Lao	(2m * 6m)	1
	Eng & Lao	(1m * 3m)	10
	Eng & Lao	(0.7m * 2m)	10

Source: JICA Project Team



Source: JICA Project Team

Figure 2.19 Flyer and Poster of the Trial Event (Left: Flyer, Right: Poster)

To avoid the problem by the traffic restriction, parking spaces were provided for cars and motorcycles in the site of temples surrounding the target area. For safety reason, one doctor and one nurse standby in the target area. Many garbage boxes were also prepared to set in the target area.

(6) Result of the Trial Event in 2016

The trial event of 2016 was held on 26th (Fri), 27th (Sat) and 28th (Sun) February 2016 for three (3) days in total. Without any serious confusions, accidents, and troubles, three days trial event completed.

On 26th February (Fri.), the first day of the event, an Opening Ceremony was held attended by Vice Governor of Vientiane, Director of Ministry Cabinet Office of MPWT, Minister of Embassy of Japan, and Chief Representative of JICA Laos Office. In the ceremony total 20 awarded persons of drawing competitions titled as History and Traditional Culture of Vientiane were commended by presenters of premium sponsors.

Public awareness about Historic Area and cityscape improvement, which is one of the most important purposes of the trial event, was completed as our expectation through exhibition of Historic Area set by National University of Laos, Historic Area walking tour guided by students, brochures distributing to visitors, drawing competitions, etc.





Polices for Securing Car Free Street



Decoration Gate of Car Free Street



Car Free Street and Visitors



Car Free Street and Visitors



Historic Town Walking Tour



Historic Town Walking Tour



Historic Town Exhibition



Historic Town Exhibition



Handicapped Persons



Handicapped Persons



Traditional Costume



Traditional Costume



Traditional Performance on the Street



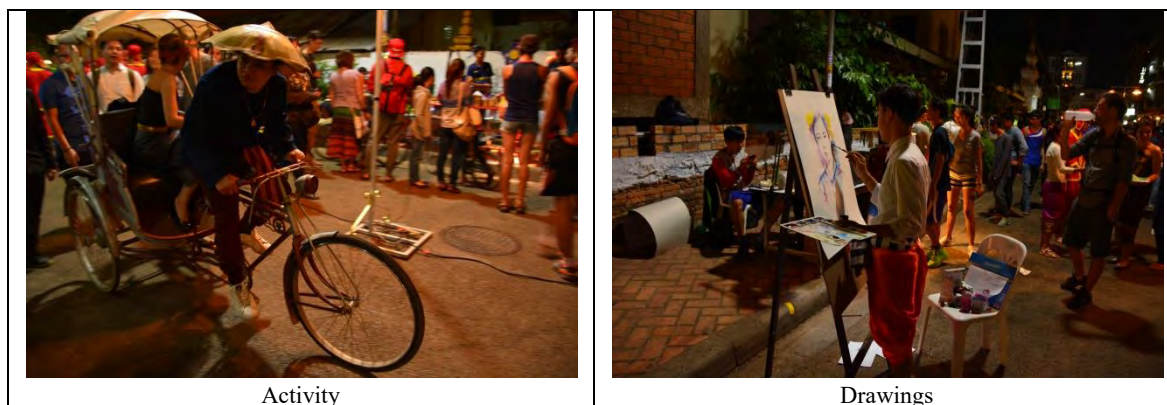
Traditional Performance on the Street



Traditional Performance on the Street



Illumination and Lighting



Source: JICA Project Team

Figure 2.20 Picture Album of the Trial Event

As one of the trial activities for cityscape improvement, Lao Brewery Company removed poles of shop sign standing reservation area (setback area) in the target area because it did not meet current regulation. The company replaced the shop signs attaching the shop buildings. The company replaced the shop signs attaching the shop buildings.

(7) Achievement of the Pilot Project (Soft Component)

Main purpose of the pilot project was public awareness in order to inform Historic Area of Vientiane to the citizen. As this community-based activity should be transferred from public initiative to private initiative in the future, more private and community involvement must be considered in the Phase 2. In addition, physical component should be implemented to show the example of cityscape improvement by considering historical and social conditions of the Area. Issues were considered in the Phase I and treated in the Phase 2 as followings.

- Issue: To improve Lao's initiatives to conduct the pilot project
Trial: JICA Project Team managed to promote and support C/P and National University of Lao to have more initiative than Phase I. Experiences of Phase I made preparation works more efficient.
- Issue: To conduct capacity development for implementation of the pilot project
Trial: All cooperative works for preparation and implementation of the pilot project with counterparts and JICA expert surely contributed to the capacity development as the OJT program. The opportunities that the events conducted twice in 2015 and 2016 made the capacity development more effective especially improvement of implementation skills and knowhow through applying a lot of lessons learnt from the first year to the second year by counterpart themselves.
- Issue: To inform value of the historic area properly and widely to the public
Trial: One of the important aims of the event was to inform value of the historic area to the public through the opportunity that a lot of people visited to the event. By the distributed

brochures and prepared exhibitions, domestic and foreign visitors seemed to recognize the value and potential of the historic area.

- Issue: To establish community-based organization for cityscape improvement activities
Trial: A series of workshops were conducted aiming at establishment of community-based organization for cityscape improvement. The public involvement by workshops has shifted its main topic from the trial event to construction works.
- Issue: To conduct hardware improvement activities related to cityscape code to be introduced
Trial: In the Project, hardware improvement which intends to make attractive pedestrian spaces in the target area has been prepared (see other section).
- Issue: To improve finance both by public and private for conducting the pilot project
Trial: Several private companies contributed the trial event as sponsors by support payment for drawing competition awards. But the payment volume was quite limited in the total budget of the trial event. No public organizations contributed in financial way.

2.6.4 Physical Component

(1) Objective of physical component

Physical component aims at improving cityscape of the Historic Area by physical improvement through stakeholder participation. In regard to the objectives of the pilot project, concept setting and contents of physical aspects were done through discussions and negotiations with the counterparts and stakeholders thoughtfully.

(2) Concept Setting of the Physical Component

Physical component of the pilot project is proposed in the selected area of the Historic Area. Basic approach of physical component and target area were proposed and approved in JCC (5) in December 2015 as shown below.

Construction works should:

- be planned through the discussions among counterparts, and be decided in the JCC meeting,
- be taken bottom-up approach (reflecting needs of local people and business operators),
- be linked with Vientiane's Trial (Concept & Target Area),
- follow the regulation to be introduced (Detail LUP/ZC of Historic Area), and
- respect relative works by other organizations (e.g. ADB)

Pilot Area for Physical Improvement (Historic Area)



Source : Prepared based on the JCC(6) (May, 2016) material

Figure 2.21 Target Area

(3) Concept/Design

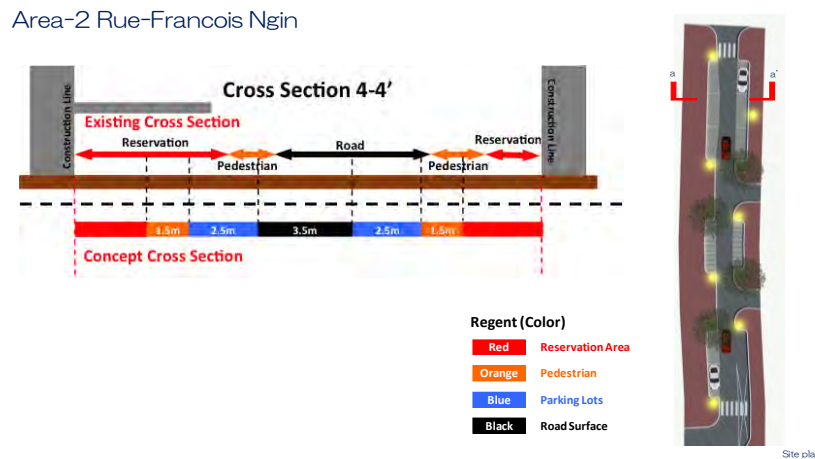
Concept and design was prepared together with C/P (PTI, DPWT, MPWT). Hard Component includes sidewalk improvement, parking space improvement, planting trees, setting benches, and placing street lights. Concept is shown below.

Area-1 Rue-Chao Anou side



Source: Document prepared by local consultant for SHM

Figure 2.22 Basic Concept (Chao Anou)



Source: Document prepared by local consultant for SHM

Figure 2.23 Basic Concept (Francois Ngin)

(4) Construction

Construction was sub-contracted to local company. C/P (PTI, DPWT, MPWT) was actively involved in construction monitoring. Construction monitoring organization is summarized below.

Table 2.26 Construction Monitoring Organizations

	Organization	Function
1	Construction Monitoring Committee (Chairman: Mr. Bounchan Deputy Director of DPWT) Member (9): MPWT, DPWT, PTI, Chan Village, Mixay Village)	<ul style="list-style-type: none"> • Construction monitoring • Organizing Construction Monitoring Committee for problem solving • Approval of changes
2	Construction company (Summit Home Company)	<ul style="list-style-type: none"> • Material procurement • Construction
3	Local assistant	<ul style="list-style-type: none"> • Construction monitoring • Design change
4	Regular meeting: PTI, DPWT, construction company, local assistant	<ul style="list-style-type: none"> • Weekly meeting: checking progress, problem solving

Source: JICA Project Team

Even though the contract with the construction company was made at the end of October, since it took a long time to receive the construction permit, construction had started on December 5 and completed on February 17. Problems and countermeasures during the construction is summarized below.

Table 2.27 Problems and Countermeasures

No	Problems	Countermeasures
(1) Chao Anou (Wat Ong Teu)		
1	Comment was raised from PT and DPWT that motorcycle space is not necessary	Space for motorcycle was changed to car parking space
2	Even though the basic design and detail design was shared by the hotel in the site, there was from the hotel to change design	<ul style="list-style-type: none"> • After discussing C/P and the hotel, pedestrian crossing was cancelled. • Slope for wheelchair was cancelled since there will not be pedestrian crossing
(2) Chao Anou (Salana Hotel)		
3	There are several requests for changing design	<ul style="list-style-type: none"> • After discussing C/P and the hotel, the area in front

No	Problems	Countermeasures
	even they agreed before	of hotel was excluded from the construction <ul style="list-style-type: none"> • Design was changed: 2 drainage was developed, one street light was cancelled. • Prepared discussion record and agreed by the hotel
(3) Francois Ngin		
4	After the side walk was removed, drainage was found. Since the drainage was not functioning, DPWT requested to rehabilitate the drainage (DPWT)	Drainage design was changed (6 sites)
(4) Street light		
5	Procurement of street light was found to be difficult (it takes 2 months to deliver)	Change the motel and change the supplier.

Source: JICA Project Team

Chao Anou Street



Survey

Francious Ngin Street



Survey



Under Construction



Under Construction



Completed



Completed

Source: JICA Project Team

Figure 2.24 Image of Construction

(5) Achievement of Technology Transfer

After the construction started, many issues were raised, so the construction was delayed and completed on February 17, 2017. Achievement of the pilot project is summarized below.

- Clarifying the role of concerned agencies
Three organizations, PTI, DPWT, and MPWT were involved. As the pilot project started role and responsibility were not clear, which lead delay of concept preparation and approval process. Design approval is responsibility of DPWT but agreement from Vientiane Capital and MPWT was required. In addition, additional documents had to be prepared. In order to manage this situation, PTI took initiative to coordinate with DPWT and MPWT by explaining to stakeholders and preparing documents
- Searching for construction monitoring
Stakeholder management and technical management were required. Conceptual design was supported by experts. During the construction stage, any change was managed by Lao side.

2.7 Environmental and Social Consideration

2.7.1 Objectives

Output of the technical transfer, the activities and indicator are as follows;

- Output 3: Capacity on urban planning of related agencies will be enhanced (focus on Inner zone and Historic Area)
- Activity 3.2: To organize stakeholder meetings to collect opinions on D-LU/ZC (Original PDM)
- Measure of verification: Record of meeting

2.7.2 Activities and Outputs of the Technical Transfer

(1) Activities and outputs in Phase 1

The JICA Project held Stakeholder meeting (SHM) three times for each of Inner Zone and Historic Area in the first year and collected opinions from stakeholders including local government, village chiefs and private sectors.

Minutes of meeting (MOM) of the 1st SHM and 2nd SHM were prepared and approved while the MOM of the 3rd SHM is under preparation in the early part of April 2015. Date and subject, important outputs are summarized in Table below.

Table 2.28 Result of the Stakeholder Meetings

SHM	1 st SHM	2 nd SHM	3 rd SHM
Date	24 th June 2014	2 nd October 2014	12 th March 2015
	One meeting covered both Inner Zone and Historic Area	Two different sessions for Inner Zone and Historic Area	Two different sessions for Inner Zone and Historic Area

SHM	1 st SHM	2 nd SHM	3 rd SHM
Venue	Vientiane Capital Office	Lane Xang Hotel	Lane Xang Hotel
Attendee	47	100 for both sessions	65 for Inner Zone, 38 for Historic Area
Subjects			
Inner Zone	<ul style="list-style-type: none"> • Explanation of SEA and SHM • Explanation of objectives and output image of the Project • Discussion and obtaining participant's opinion on urban management • Further schedule of the project and SHM 	<ul style="list-style-type: none"> • Explanation of the purpose of planning • Explanation of concept and draft of D-LUP/ZC, comparison of two alternatives and decision • Q&A and discussion • Further schedule 	<ul style="list-style-type: none"> • Explanation of D-LUP/ZC updated after the 2nd SHM • Q&A • Exchange opinion among stakeholders
Historic Area		<ul style="list-style-type: none"> • Awareness raising of the Historic Area • Result of the interview survey • Explanation of cityscape code • Explanation of the Pilot Project • Q&A and discussion • Further schedule of the project and SHM 	<ul style="list-style-type: none"> • Explanation of the cityscape code and regulation; • Presentation of the result of the pilot project "Vientiane Trial" • Q&A and exchange opinion among stakeholders
Conclusion			
Inner Zone	<ul style="list-style-type: none"> • It was confirmed to continue study on the regulation in the Inner Zone and the Historic Area on such subjects as: building height, countermeasures to violations. • Strengthening human Resource is important • Control of concession area is important to improve or renovate historical or colonial buildings in this zone in the future. 	<ul style="list-style-type: none"> • Sustainable development was agreed. • The Alternative 2 option (Separated zoning for development corridor) is better, but additionally it is necessary to study on the primary arterial road. • The height of building in between 26-30m is a special building by the decision of government • Determine the services activities along each and every road as we as a parking lot • Clearly determine the construction on the arterial road 	<ul style="list-style-type: none"> • Sustainable development is agreed. • Determination of commercial zone, administration and business zone, and so on, makes Vientiane Capital sustainable. • Problems still remain such as: • Building use should be considered because building use changes for many purposes. • For cityscape renovation, it is necessary to keep Lao identify for Vientiane Capital as international gateway city and capital city.
Historic Area		<ul style="list-style-type: none"> • Specific zoning regulation is necessary, such as color, advertisement board, stretch part of building. • Therefore, the expert team must study, research, analyze on this problem in order to achieve a sustainable historic town development. Participation from the local people is the most important • The team must arrange the plan of 3 main pillars to explain which pillar should be done first, follow by second and third. 	<ul style="list-style-type: none"> • We (must) continue urban development management especially in the Historic Area. • We have to create comprehensive cityscape code and manual, building code (height), and others, and also advertisement sign. • Establishment of guide plate and publishing tourist guide both to tourists and local people who visit Vientiane (is important). • We continue to raise public awareness. What was done in

SHM	1 st SHM	2 nd SHM	3 rd SHM
		<ul style="list-style-type: none"> • Basically the building height is 12m, but the team must formulate in the detailed regulation • Selected area and contents for the pilot project is admitted/accepted 	<p>the Vientiane's Trial was very effective</p> <ul style="list-style-type: none"> • Development of basic infrastructure in the Historic Area in cooperation with other fields such as parking lot, drainage, garbage management and so on. • We continue to encourage good activities, with neighbor countries and international organizations

Source: JICA Project Team

(2) Activities and outputs in Phase 2

The JICA Project held Stakeholder meeting (SHM) three times for each of Inner Zone and Historic Area in the Phase 1 and collected opinions from stakeholders including local government, village chiefs and private sectors. SHM was utilized to discuss D-LUP/ZC and pilot project in Phase 2.

Date and subject, important outputs of SHM (4) are summarized in Table below.

Table 2.29 Result of the Stakeholder Meetings

SHM	4th SHM
Date	8 th December 2015
Venue	Mekong Riverside Hotel
Attendee	AM session: 46, PM session: 72
Subjects	
Inner Zone	<ul style="list-style-type: none"> • Discussion and obtaining participant's opinion on D-LUP/ZC in Historic Area (City wall), Thatluang area and Inner Zone • Explanation of pilot project
Historic Area	
Conclusion	
Inner Zone	<ul style="list-style-type: none"> • All participants or stakeholder agreed with the draft of D-LUP/ZC. This meeting is to make the technical staff understand about the administration, management based on economy, social-culture and environment. • Therefore, to create a beautiful city to be sustainable and valuable, 3 main pillars are important. After the agreement in this meeting, the draft of D-LUP/ZC will be proposed to higher level for an approval.
Historic Area	

Source: JICA Project Team

(3) Technical Transfer to C/P

1) Means of activity

In the period of preparation of SHMs, the project team explained to the C/P personnel what the purpose of SHM is, who important participants are, and how presentation should be understandable. Also the Team prepared SHMs in close discussion with them about date, venue, and agenda as well as finalization of presentation materials. As for the presentation materials, PTI project manager and technical officers together with the Project Team held

number of technical meetings to discuss the materials. Also, JET shared with the PTI project manager the draft minute of SHMs.

2) Outputs and Lessons learnt

SHMs were organized and C/P participated as; chairman, MC (master of ceremonies) and most of presenters.

Close discussion with C/P was important to decide even detailed matters such as the style interpretation and agenda. As C/P has not had much experience in holding stakeholder meetings, this is the good opportunity for them to manage meeting inviting not only technical officers but also village chiefs, inhabitants and private sectors.

2.8 GIS Database Development

2.8.1 Objectives

This activity is related to output 2 and 3 which written in Record of Discussions.

- Output: To enhance GIS operating skills of project staffs
- Activities:
 - a) Construct GIS Database
 - b) Update data of Land Use Plan in Core Urban Area (62,000ha)
 - c) Develop the topographical map in Inner Zone (4,000ha)
 - d) Train C/P staff

Phase 1, which is considered core activities in the Project, focuses on understanding of GIS and GIS database preparation, and Phase 2 focuses on continuation of GIS database utilization. Since those who received training has changed in Phase 2, training on understanding of GIS was repeated.

2.8.2 Activities and Outputs of Technical Transfer for Phase 1

Activities and Outputs for GIS database development are i) Construction of GIS database, ii) Update data of G-LUP (62,000 ha), develop topographic map in Inner zone (3,700 ha)

(1) GIS Database development

Construction of GIS Database is composed of selection of PC, purchase of GIS database (Arc GIS), construction of GIS Database. Among them construction of GIS Database is considered main activities for technical transfer.

GIS Database was constructed systematically for not only in this project but in preparation for adding other data concerned with urban planning. Main contents of GIS Database are shown in table 2.30.

Table 2.30 Main Contents of GIS Database

Items	Contents
10 Existing Data	Existing data which developed in M/P 2011
20 Satellite Images	Satellite images which purchased by the Project
30 Simplified Map	Data relating to topographical map
50 Land Use Plan	Data relating to G-LUP

Source: JICA Project Team

(2) Update data of G-LUP (62,000 ha)

Update data of G-LUP was conducted in the following steps.

1) Confirmation of existing data

GIS data for JICA M/P Study in 2011 was confirmed and issues were identified as followed.

- Many polygons overlapped other polygons, and also had some joint gaps.
- Some boundaries did not overlap with features accurately.
- Center line of the road was developed only around Historic Area.

Most of Urbanized Area and Its Outskirts was covered by QuickBird images with high resolution, and the other range of the area was covered by ALOS images with relatively low resolution. Both of Quickbird and ALOS images shot in 2008.

2) Update data

Table 2.31 shows sources and contents which used for updating data.

Table 2.31 Sources and Contents of Updating Data

Sources	Contents
Feature boundary	Digitize features of which can clarify its boundary as road.
Center line of road	Digitize center line of road in whole core urban area.
Current land use plan	Refer and compare with GIS data.
Industrial complex	Plot its area on GIS with coordinates.
Large-scale development area	Lay on GIS data and digitize boundaries of the area.
Settlement located in suburban	Create buffer zone with optional range from center line of road.

Source: JICA Project Team

Setting the policy of update data above, it became possible to update data by GIS staff and C/P staff.

(3) Develop topographic map in Inner zone (3,700 ha)

1) Purchase of Satellite Images

WorldView2 images which has enough resolution for scale of 1/5,000 mapping were used as the base map of the topographical map (hereinafter called as 'topo-map') in Inner Zone. Considering its date (newer) and cloud amount (less cloud), we purchased the images shot in November 2011.

2) Subcontract

Development of the topo-map was done partially by the local subcontract based on digitized satellite images with ArcGIS software and supplemental field surveys. Contents of subcontract are shown in table 2.32.

Table 2.32 Contents of Subcontract, Type of Data and Range of Digitizing

Contents of Subcontract	Type of Data	Range of Digitizing
Right of way of road	Polyline	Whole Inner Zone
Boundaries between pedestrian and carriage way	Polyline	
Right of way of canal, boundaries of river and pond	Polygon	
Medium-scale buildings with a building area of 2,000 m ² or more	Polygon	
All other buildings	Polygon	Whole Historic Area and sampling area

Source: JICA Project Team

The outputs of subcontract are GIS data (shape file), printed map with scale of 1/5,000 and its PDF data.

3) Complement of the topo-map

Only a part of buildings were digitized in subcontract works. However, GIS staff and C/P staff made efforts to digitize another buildings in whole Inner Zone, then final version of the topo-map had all buildings.

(4) Train C/P staff

1) Technical session for comprehend basic of GIS

In order to enhance C/P's comprehension about GIS, technical session was held in February 2014. The contents of the session are as follows;

- Title: What is GIS?
- Main contents:
 - Concept of GIS
 - Coordinates and projection, coordinates using in Lao
 - Data type of GIS (raster and vector)

2) Practical work of ArcGIS operation

JICA Expert Team demonstrated how to install ArcGIS and register it at the same time of the technical session above, and also implemented the practical works of ArcGIS operation for C/P regularly. Main contents of these practices are shown in table 2.33.

Table 2.33 Main Contents of Practices of ArcGIS Operation

Items	Contents
Application	ArcMap, ArcCatalog
Basic operation	How to use tools, shortcuts and so on
Raster and vector	Representative data types and their specific contents * A little more advanced contents explained technical session above
Operation of layer	Operation of layer in ArcMap
Data editing	Create a new feature and edit existing features
Attributes	Input attributes concerned with the feature

Geo-reference	Alignment of non GIS data (e.g. CAD, JPEG)
---------------	--

Source: JICA Project Team

The original member of C/P who practiced ArcGIS operation went abroad to study during first phase of the project. New CP was assigned who are in charge of GIS.

Outputs of technical transfer of this activity are as follows;

- Comprehension about GIS have improved
- Capacity of GIS -operating, editing data, creating maps- have been progressing

2.8.3 Activities and Outputs of Technical Transfer for Phase 2

Based on the activities in Phase 1, activities related to GIS database management have shifted from development to utilization. Main activities are listed as shown below.

- Utilization of maps for Detail Land Use Plan preparation including Historic Area of Thatluang
- Data input of building survey. Activities and Outputs of Technology Transfer for DZC in the Target Zone. Following is the points of GIS activities.
 - Technical Knowledge: Improve the basic knowledge such as the map projection, software, function and data type and the structure, and mapping, Acquire the knowledge on GIS's utilization method such as mapping, data analysis and urban management
 - Operation Skills: Acquire the basic skills such as data management, digitizing (polyline and polygon), data input, data import and export, and map developing, Acquire the necessary skills for building survey through the OJT, Acquire the necessary skills for management of land use plan through the OJT

As the achievement of technical transfer in Phase 2, following understanding and capacity for formulation of database management were enhanced.

- Building information (building usage, height, BCR, FAR) input to topographic map for selected area in Inner Zone.
- Map preparation including revision and output.

2.9 Counterpart Training in Japan

The long term expert arranged a counterpart-training plan in Japan for two times, and then, accompanied the training in Japan in order to support the training, and also gave a lecture in the training.

The counterpart-training has been successfully done in the term of:

- 12 days from 23 Feb. (Sunday) to 6 Mar. (Thursday), 2014 (First trip, see Table 2.34), and
- 12 days from 7 Mar. (Monday) to 18 Mar. (Friday) 2016 (Second trip, see Table 2.35).

Table 2.34 First C/P Training in Japan

Outline

Term	12 days from 23 February to 6 March 2014.		
Participants	Organization	Post	Name
	DHUP of MPWT	Deputy Director of Urban Planning Division	Mr. Santana CHOUMMANIVONG
	PTI of MPWT	Head of Urban Planning Section	Mr. Chanthasack BOTTAPHANITH
		Technical staff	Mrs. Sonenathy PAKUONLUANG
		Technical staff	Mr. Khamphonemisay PHOMMATHATH
	DPWT in VTE	Technical staff	Mr. Aliyasack PHENGSENGSAY
		Technical staff	Mr. Thinnakone PHIMMAVONG
	MPWT: Ministry of Public Works and Transport DHUP: Department of Housing and Urban Planning PTI: Public Works and Transport Institute VTE: Capital Vientiane DPWT: Department of Public Works and Transport		
Companions	Mr. Tomohiro HASEGAWA (JICA Expert)		
	Ms. Mari HURUKAWA (JICA Coordinator and Interpreter between Lao and Japanese)		
Objectives	To study Japanese Urban Development Management Systems, such as: - Land use plan and Zoning code, - Cityscape code and related measures, and - Land readjustment project.		
Language	Text	Lao in principle	
	Lecture	Interpretation between Japanese and Lao	

Results

Month /Day	Accommodation	Time	Activities	Contents of the lecture and on-site study	Place
2/23 Sun		1830	Gather at Airport		
		2005 2110	Trip (Vientiane>>Hanoi >>Tokyo)	Vientiane>>Hanoi (VN0920)	
2/24 Mon	JICA Tokyo	0020 0700			Hanoi>>Tokyo (Narita in Chiba Prefecture) (VN0310)
		0740 1000	Trip (Airport >> JICA Tokyo)	Limousine bus + Taxi	
		PM	Free		
2/25 Tue	JICA Tokyo	0930 1230	Lecture by JICA	Introduction to stay in Japan Orientation of the program	JICA Tokyo
		1330 1730	Lecture by Mr. Tomohiro HASEGAWA	Lecture on: - Urban Land Use Control Systems in Japan, and - Building Control Systems in Japan	
2/26 Wed	JICA Yokohama	0845 0945	Trip (JICA Tokyo >>JICA Yokohama)	by Bus hired by JICA	
		1000 1700	Lecture and On-site study arranged by Yokohama city	Lecture on urban control administrations in Yokohama city, such as:	
2/27 Thu	JICA Yokohama	0930 1700		- City Plan, - Building control, - Countermeasures against violations, - Incentive programs, - District plan (Detail plan), and - Cityscape control.	
2/28 Fri	JICA Yokohama	1000 1700		On-site study, such as: - Various land use zones, - District plan (Detail plan), - Minato-mirai Project, and - Harbor area.	
3/1 Sat	JICA Yokohama	AM	Free		
		PM	Free		
3/2 Sun	Hotel Hokke Club Kyoto	AM	Trip (Yokohama>>Kyoto)	By Shinkansen	
		PM	Site seeing in	by JICA arrangement	

Month /Day	Accommodation	Time	Activities	Contents of the lecture and on-site study	Place
3/3 Mon	JICA Chubu	900 1500	Lecture and On-site study arranged by Kyoto city	Lecture on Cityscape control in Kyoto city, and On-site study in city-scape preservation area.	Target area
		PM	Trip (Kyoto>>Nagoya)	Kyoto station>>Nagoya station	
3/4 Tue	JICA Tokyo	0900 1200	Lecture and On-site study in Nagakute city	Lecture on administration of Land Readjustment Project in Nagakute city in Aichi prefecture, and On-site study on the project site.	Project site
		PM	Trip (Nagoya>>Tokyo)	Nagoya station >>Shinagawa station>>Shinjuku station	
3/5 Wed	JICA Tokyo	930 1100	Evaluation meeting	JICA and participants had a meeting to evaluate the training.	JICA Head Office
		PM	Free		
3/6 Thu		0600 0750	Trip (JICA Tokyo >>Airport)	Taxi + Limousine bus	
		1000 1430	Trip (Tokyo >>Vientiane)	Tokyo (Narita in Chiba Prefecture)>>Hanoi (VN0311)	
		1640		Hanoi>>Vientiane	
		1750		(VN2897)	

Source: JICA Project Team

Table 2.35 Second C/P Training in Japan
Project for Urban Development Management in cooperation with JICA

Outline

Term	12 days from 7 (Monday) to 18 (Friday) March 2016.		
	Organization	Post	Name
Participants of Lao people (Nine in total)	PTI of MPWT	Director General	Ms. Phonesavanh PHENGSYDA
		Deputy Director of Planning & Cooperation Division	Mr. Chanthasack BOTTAPHANITH
		Technical staff	Ms. Sonenathy PAKUONLUANG
		Technical staff	Mr. Somchit CHERSHOUATHOR
	DHUP of MPWT	Deputy Director of Urban Planning Division	Mr. Santana CHOUMMANIVONG
		Technical staff	Mr. Sulikorn XAYXANA
	DPWT of VTE	Deputy Director of Housing and Urban Planning Division	Mr. Soubinh PHOUTHAVONG
		Technical staff	Mr. Loumkham CHANTHAPANYA
		Technical staff	Mr. Vientiane BANETHONGSAY
		MPWT:	Ministry of Public Works and Transport
	DHUP:	Department of Housing and Urban Planning	
	PTI:	Public Works and Transport Institute	
	VTE:	Vientiane Capital	
	DPWT:	Department of Public Works and Transport	
Companions	Mr. Tomohiro HASEGAWA (JICA Expert attached to PTI) Ms. Mari HURUKAWA (JICA Coordinator and Interpreter between Lao and Japanese)		
Objectives	To study Urban Development Management Systems, such as: - Land use plan and Zoning code, - Cityscape code and related measures, and - Urban Development projects, of Japan, etc.		
Language	Text	Lao in principle	
	Lecture	Interpretation between Japanese and Lao	

Schedule

Day	Time	Contents	Location	Accommodation
7 Mon	1830	Meet at Wattay Airport		In airplane
	2005-2110	Vientiane >> Hanoi (VN920) >> Tokyo/Narita (VN310)		
8 Tue	0030-0700	Narita Airport >> JICA Yokohama (by bus hired by JICA)		JICA Yokohama

Day	Time	Contents	Location	Accommodation
	1300-1530	Introduction to Japan	SR7, JICA Yokohama	
	1600-1700	Program Orientation		
9 Wed	0845-0945	JICA Yokohama >> MLIT (by bus hired by JICA)		JICA Yokohama
	1000-1030	Courtesy call to Housing Bureau, Ministry of Land, Infrastructure, Transport and Tourism of Japan	Meeting Room on 2nd floor MLIT in Tokyo	
	1030-1200 1300-1430	Land Use Control and Building Control in Japan - presentation by Mr. HASEGAWA		
	1500-1630	Land Use Control and Building Control in Japan - discussion with staff of MLIT		
	1600-1800	MLIT >> JICA Yokohama (by bus hired by JICA)		
10 Thu	0745-845	JICA Yokohama >> Harumi in Tokyo (by bus hired by JICA)		JICA Yokohama
	900-1200	Urban Development Project and City Planning - presentation by UR, and inspection of the project	Project site in Tokyo	
	1330-1400	Tsukishima in Tokyo >> Building Center of Japan by bus hired by JICA		
	1400-1630	Designated Agency and Building Confirmation Process - presentation by BCJ (Building Center of Japan)	BCJ in Tokyo	
	1645-1800	BCJ >> JICA Yokohama (by bus hired by JICA)		
11 Fri	0840-0850	JICA Yokohama >> JN building (by JICA bus)		JICA Yokohama
	900-1200	(1) Building height control, (2) Advertisement control, and (3) Town upgrading in Motomachi mall, in Yokohama City - presentation by Yokohama City, and inspection	in Yokohama	
	1300-1415	Yokohama → Iidabashi in Tokyo (by JICA bus) 45 min at minimum		
	PM 1430-1630	Urban Development Implementation in China - presentation by DAIWA HOUSE	DAIWA HOUSE in Tokyo	
	1645-1800	Iidabashi in Tokyo >> JICA Yokohama (by JICA bus) 50 min at minimum		
12 Sat	AM PM	Free on Saturday		JICA Yokohama
13 Sun	0730-1100	JICA Yokohama >> Shin Miyako Hotel (by JICA bus and Shin-kansen)		Shin Miyako Hotel in Kyoto
	1230-1700	Bus tour (Kinkaku-temple and Kiyomizu-temple)		
14 Mon	0830-0845	Shin Miyako Hotel >> Kyoto City Hall		JICA Kansai (in Kobe)
	0900-1200	City scape, focusing on control of building design and advertisement - presentation by Kyoto City, and inspection	in Kyoto	
	1200-1430	Kyoto >> Kobe (by bus hired by JICA) including lunch		
	1500-1830	On-site Study in Kobe regarding city-scape	in Kobe	
15 Tue	0900-1220	Master Plan, City Plan, and Development Guideline in Kobe	JICA Kansai	JICA Yokohama
	1320-1600	On-site study in Kobe regarding urban development	in Kobe	
	1600-2100	Kobe >> JICA Yokohama (by JICA bus and Shin-kansen) including supper		
16 Wed	900-1130	(1) Confirmation of the result of the training, and (2) Discussion on City Planning and Building Control in Laos in future - facilitated by Mr. Hasegawa, staff of UR, and Consultant Team	Icho, JICA Yokohama	JICA Yokohama
	1210-1310	JICA Yokohama >> Kamakura by JICA bus		
	1330-1600	Land use control and City-scape control in Kamakura City - presentation by Kamakura City, and inspection	in Kamakura	
	1600-1700	Huge Statue of Buddha in Kamakura		
	1700-1800	Kamakura >> JICA Yokohama by JICA bus		

Day	Time	Contents	Location	Accommodation
17 Thu	0900-1100	Evaluation meeting	Icho, JICA Yokohama	JICA Yokohama
	1130-1200	Closing ceremony		
	PM	Free for the last day		
18 Fri	0530-0715	JICA Yokohama >> Narita Airport (by bus hired by JICA)		
	0930-1350	Tokyo/Narita >> Ho Chi Minh (VN301) >> Phnom		
	1615-1700	Penh (VN920)		
	1800-1920	>> Vientiane (VN920)		

Source: JICA Project Team

CHAPTER 3

ISSUES AND THE COUNTERMEASURES ON THE PROJECT IMPLEMENTATION, AND RECOMMENDATIONS (REGARDING JICA LONG TERM EXPERT)

3.1 General Matters

Issues and Countermeasures

Counterparts are gathered from three organizations, of which offices are located in different places. It was needed to involve all counterparts regularly. We held counterparts meeting almost every week to discuss how to solve the problem, how to formulate plans regulations, etc.

It was difficult to communicate with some CP in English. We prepared meeting material for counterparts meeting in both English and Lao, and exchange opinions each other through interpreter.

Recommendations for the following project

Regular meeting and translation work are very effective.

3.2 Urban Development Control Systems and Regulations

Issues and countermeasures

Existing Lao systems and regulations regarding urban development are based on various backgrounds, such as:

- City Planning System imported from France,
- Land Right System like China,
- Traditional buildings (wooden post & beam structure) like other South-East Asian Countries and Japan.
- French colonial buildings, style of which was arranged in Laos, and are different from French colonial style in Vietnam.

When we formulate new systems and regulations, we were not concerned about particular foreign country. We adopted various systems and regulations if they are suitable for Laos.

Recommendations for the following project

Knowledge covering various countries are useful in formulating new systems and regulations.

3.3 Counterpart Training in Japan

Issues and countermeasures

Most Japanese lecturers are not familiar with Lao situations of urban development.

Mr. Hasegawa let them know outline of Lao situations of urban development, and discussed with them what kind of topic is useful for Lao trainees beforehand.

Recommendations for the following project

Preparation work of counterpart training is very important for fruitful results.

CHAPTER 4

ISSUES AND THE COUNTERMEASURES ON THE PROJECT IMPLEMENTATION, AND RECOMMENDATIONS (REGARDING JICA SHORT TERM EXPERTS)

4.1 Outlines

Issues and lesson learned are compiled for each activity and output of the Project.

4.2 Formulation of G-LUP/ZC (62,000ha), D-LUP/ZC in the Inner Zone (4,200ha) (Output 2 and 3)

4.2.1 Output 2: G-LUP/ZC

- (1) Promotion of C/P staff's participation into the project activities in consideration of their workload for the other regular works

Issues and countermeasures

It was concerned that C/P staff's participation to the project activities such as planning work and technical meeting will be insufficient due to their workload for the other regular works. For the countermeasure, JICA project team provided the detail work plan in advance in order to secure their work time by the arrangement of the regular work schedule. The detail work plan described the work steps, schedule and detail activities.

Lesson Leaned

As the lesson, although the countermeasure was effective for the project implementation, it should be originally recognized that participation to project activities will be one of the C/P regular work. That will be common issue among technical assistance projects. Volume of other regular work of C/P staffs should be arranged before starting the project under the coordination with the counterpart.

- (2) Additional Work for Revision of the General Zoning Code as the Out of the Scope

Issues and countermeasures

In the project implementation, it was confirmed that current General Zoning Code should be revised together with revising General Land Use Plan. However, the revision of GZC was the out of scope of the project activities. For the countermeasure, JICA project team coordinated that C/P staff responsibly revise the GZC under the technical advice from long-term expert.

Lesson Leaned

As the lesson, it was confirmed that hybrid-team with consultants and long-term expert can flexibly function toward the additional work as described above. On the other hand, it is required that necessity of important activities such as revising of zoning code should be clarified in the

formulation of the scope of work of the project in consideration of avoiding project input increasing during the implementation.

(3) GIS Database Development

1) Sustainability of GIS operation

Issues and countermeasures

In order that GIS staff become skillful in GIS, it is necessary for them to operate GIS continuously. CP who has been assigned for GIS forgot operation after he did not access GIS for some time, and also there is change of staff for which training has to be repeated to new staff. C/P should be trained and practice GIS continuously (update information, using GIS for permission process).

One of countermeasures for securing skills that was applied to the Project is for CP to prepare base map for Inner Zone where Detail Land Use Plan was prepared. It took almost 6 months to prepare base map but CP had a chance to operate GIS continuously.

Lesson Learned

In order to secure sustainability of GIS skills, the operator has to operate GIS continuously by providing long term assignment and short term assignment. The objective of long term assignment is to provide work that can last several months such a task as preparing topography map and land use map, so that the CP has a chance to operate GIS continuously. Short term assignment is provided which can be completed in a few days.

In addition, several GIS staff should be assigned in case any of them becomes not available during the project period

2) Accuracy of GIS database and map information

Issues and countermeasures

Topographic map and database preparation was implemented by sub-contracting work with the support of local assistant and counterpart. For preparation of topographic map and GIS database, little information was available initially, and the map has to be prepared in a short period of time.

For the data and information required for the map preparation, the project team tries to acquire data which is not in GIS format, such as CAD and pdf to supplement map preparation, then later found out that some data available is old and not accurate.

Lesson Learned

For map preparation, the information should not be limited to GIS, but try to acquire other forms of data such as CAD because CAD data is widely used in many countries. Also the

source and the year of data prepared have to be reviewed before utilizing for the Project purpose.

4.2.2 Output 3: Formulation of Detail Land Use Plan/Zoning Code

(1) Lack of Future Urban Image of Target Area and Planning skill of C/P staffs

Issues and countermeasures

In the beginning of formulation work for the D-LUP in the target area, it was confirmed that C/P staffs didn't have any policy and future image for the urban development for the target area which will be a basic concept of the D-LUP. In addition, C/P staffs didn't have much experience on urban planning for existing urban area and knowledge of the formulation process and the output. For the countermeasure, JICA project team conducted the technical meetings to formulate the concept plan which will be a basis of the D-LUP. The concept plan was developed through the theological process such as current condition analysis using large-scale maps, analysis of urban factors and development of concept plan for each urban factor by the cooperation work with C/P staffs. This approach was effective for the technical transfer with providing ownership of C/P staffs. Before the planning work, JICA project team provided the work flow and the samples of the output to make well-understand the work process. In addition, the presentation materials were used for the contents of the planning manual in order to secure the work-efficiency of the project activities.

Lesson Learned

As the lesson, it was impressed that young-age staffs even in the urban planning section lacked of planning experience due to the current situation that planning work is consigned to private design companies. For the capacity upgrading in the technical assistance project, transferring of planning techniques including the basic knowledge should be done by using the clear approach and visual which is easy to understand, and through the practical approach such as technical training on the plan formulation.

(2) Securing Accuracy of Result of Existing Building Survey and the Technical Transfer for Urban Management Work after the Project Completion

Issues and countermeasures

Existing building survey was conducted in order to confirm the applicability of draft D-LUP/ZC which regulate type of land use, building coverage ratio, floor area ratio and building height. It was required that the survey result have the enough accuracy to confirm the applicability of D-LUP/ZC in the limitation of the work in the cost and schedule. Moreover, it was necessary to consider the C/P's self-support implementation after the project completion because the building survey will be one of the important work for the urban management. For the countermeasure, 20

urban blocks representing the characteristics of each zone of D-LUP were selected as survey area in consideration of priority of securing the accuracy rather than the survey coverage. Although calculation of BCR and FAR required data of land area, it was difficult to procure the official land data, and use paper-based cadastral with low-accuracy. For this, land data were developed through the site survey using by laser measuring devise. For the preparation of the survey, JICA project team provided the survey manual and requested assignment of C/P staff to be the supervisor for the outsourced private surveyors. These countermeasures supported to obtain the accuracy of the survey result, provide ownership of C/P staff and transfer the survey method.

Lesson Learned

As the lessons, it was confirmed that proposing of appreciate survey method fitting the objective supports time-effective activity, although technical assistance project in urban planning always covers huge urban area. In addition, even if the survey is implemented as the out-sourced activities, involvement of C/P staffs will support the effective technical transfer.

- (3) Flexible revision of regulation (Cityscape code).

Issues and countermeasures

Cityscape code was drafted based on field survey in Vientiane. The draft was proposed at counterpart meeting, and contents have been discussed, but initial discussion of cityscape was general. The contents have to be more detail for the cityscape code to be more efficient for conserving and creating cityscape.

Cityscape code has been revised through counterpart meeting (PTI, DPWT, MPWT) and additional field survey was conducted to investigate detail of existing condition in Vientiane. For example, first version of regulation is that only mat-white was allowed. After counterpart meeting and field survey, it was found that the color of wood was allowed if the building structure uses wood. Color of wood was added the required conditions for the final version of regulation.

Lesson Learned

It was effective to discuss at the counterpart meeting based on the results of field survey. The final version has become more appropriate cityscape regulation that can be accepted from the local government.

4.3 Output 4: Capacity on urban development control will be enhanced (focus on Historic Area)

4.3.1 Approval of D-LUP/ZC

Issues and countermeasures

Output 4 is designed to disseminate the D-LUP/ZC developed and provide training to those who will use the regulation after the D-LUP/ZC is officially approved. The long term expert tries hard to push for approval, but D-LUP/ZC was not approved during the Project period. The Project can support technical aspect but difficult to be involved in the approval process.

To solve this situation, operation and management manual, reference book, and brochure have been prepared so that after D-LUP/ZC is approved, CP can use these materials for dissemination and training.

Lesson Learned

Including “approval” as condition for executing activity is considered as a risk of not being able to execute some activities. Alternative should be thought out in case approval cannot be realized.

4.3.2 Reference Book

Issues and countermeasures

Since CP did not have experiences of preparing design reference for the Historic Area including categorization of building types and recommended design and materials, discussion was not active initially.

JICA Study Team requested to collect the documentation on the architectural history of Vientiane and architectural style, and drafted Reference Book. Since Reference Book was prepared with the existing materials and information, no active discussion was done at counterpart meeting initially.

Lesson Learned

In preparing Reference Book, the Project Team received advices from an architect working in Vientiane; a French architect who studied the architecture of Luang Prabang, Professor of Architecture at the University of Laos, EFEO (École française d'Extrême-Orient) and Collector of old photographs of Vientiane. Some staffs of counterpart know these architects. As a result of the involvement of local architects for formulation of Reference Book, the counterpart gained a sense of closeness to Reference Book. The users of Reference Book are architect, developer and land owner. Reference Book will have more value through the involvement of local architects in a situation where comprehensive knowledge on history and local architecture is required.

4.4 Pilot Projects (related to cityscape improvement)

4.4.1 Soft Components

(1) Issues and Problems

Publicity of Historic Area's Value

According to result of the interview survey done in the project, it was made clear that 31% of residents, 40% of business operators, and 55% of tourists do not know about the Historic Area in Vientiane. As the first step toward conservation and maintenance of the historic area and its value, it is necessary that all stakeholders understand and cherish the existence and value of the historic area properly. The key issue on this matter was how to do publicity of historic area's value to the stakeholders.

Stakeholder's Understanding of the Trial Event

Because holding the trial event is the first time for Vientiane, it was needed to make stakeholders understand its purpose, methodology and merit appropriately. Although the stakeholder meetings were held to explain the event, information of the event seems not to be well-known in the target area. Considering such situation, the key issue on this matter was how to make stakeholders understand the trial event.

Sustainability of Cityscape Improvement Management Activities

The main objective of the trial event is to make a trigger for conservation of the Historic Area, promotion of tourism business, and promotion of area management. As subsequent movement after having twice of the trial event supported by JICA project in terms of its budget and manpower, it is recommendable that such event would be conducted by initiatives of residents, business operators and local authorities. Additionally the event would encourage to improve cityscape and to implement area management. The key issue on this matter was how to promote cityscape improvement movement for its sustainability.

(2) Actions and Countermeasures

Explanations and Dissemination to Residents, Business Operators, and Stakeholders

In the first phase, stakeholder meetings were held for explanation of the trial event to the residents and business operators in the target area in regard with value of historic area and necessity of cityscape improvement. But it faced difficulty to share its value and necessity appropriately with stakeholder because of the first time to do so, especially oppositions of the business operators against restriction of car inflow and tentative removal of parking cars and signboards. To solve the problem, it was conducted thoroughly to explain some key persons and individual business operators in the target area, and then to reflect their opinions to revised operation way of the event as much as possible. Through it, the event of the first year (2015) was completed successfully without any trouble and accidents. Since all stakeholder understood well,

the event of the second year (2016) was smoothly prepared and completed. Additionally distribution of brochures which include explanation of Historic Area and implementation of walking tours guided by students were popular in the event for the purpose of deepen the understanding of the trial event.

City Improvement Workshop in relation with the Trial Event

In connection with the trial event which tends to be more tentative activity, cityscape improvement workshops were held targeting residents and business operators in both the first year and second year. In the first year, JICA project team designed the workshop and implemented as sub-contract work by private consultants. In the workshop, some guest lecturers were invited from a variety of countries such as Japan, Laos, France and Thailand. A walking tour was also done in the workshop. In the second year, more initiative of local community was considered from the design of the event. Focused meetings (5 times) which consists of smaller members of residents and business operators as well as the cityscape improvement workshop were conducted in order to discuss more details of design and operation of the event. Consequently consensus building was made smoothly among the related persons of the trial event.

Initiative Participation of the Universities to the Trial Event and the Workshop

To secure sustainability of cityscape improvement activities, initiative participation of the universities, especially National University of Laos (NUOL), was strongly promoted in the project. Both in the first and second year, walking tour was designed and operated by NUOL students. Additionally teachers and students of NUOL played a role of organizer, facilitator and operator of cityscape improvement workshop. The review of the workshop was also done by NUOL. By this, it is deeply expected that NUOL would participate to the activities of cityscape improvement after completion of the JICA project.

(3) Lessons Learn and Recommendations

Effective Implementation of the Trial Event holding its Policy

The preparation and operation of the trial event managed to be done without any knowhow and experiences in the first year. Therefore much more inputs from the project team, counterparts and sub-contractor were necessary than it was expected. To make a good use of the experience of the first year, inputs decreased in the second year. Because attractive street spaces and cityscape were created by construction works in the project finally, it is deeply expected that a sort of event which did in the project would continue by initiative of local community in the improved places. To realize above, stronger cooperation and support of local authorities and universities are necessary in terms of clarifying administrative procedure of the event (e.g. traffic restriction) and promoting profits of business operators. In parallel to do this, remind of the event policy

which is to conserve Historic Area value and not to seek only income benefit from visitors. Because workshop participants requested (1) to succeed Laos' culture and history in the next generations, and (2) to activate their community and to promote tourism business through the attractive and original cityscape, such policies must be held firmly in the future.

Promotion for Activities' Sustainability

In the held workshops, periodical discussions were done by the residents and business operators. Promotion of NUOL's Initiative participation was also considered for being more local-based activities. Establishment of new mechanism in terms of institution and budget must be considered for its sustainability. To be more precisely, contribution from large private companies or cooperative investment from business operators in the target area are good solution for budget creation. Additionally establishment of implementation committee and cooperation of NUOL can be considered for institutional improvement. Although such proposal was already done in the project, leadership and initiative are necessary from residents, business operators, governments and local authorities, and universities in conclusion.

4.4.2 Hard Components

(1) Planning and designing stage

Issues and countermeasures

Approval of design concept and design took time. This happened mainly because responsible agency and the process were not clear and also it took time to reach consensus on design concept and plan. Also additional information was requested several times before the approval process proceeds.

Concerned parties such as DPTW, PTI, MPWT, the Project Team met regularly to discuss approval process and required documents for approval and consensus building.

Lesson Learned

Continuous meeting is required to secure efficient approval and implementation process, through which steps for approval and documents required have to be checked.

(2) Construction stage

Issues and countermeasures

Construction work faces different types of challenges. One is the management of stakeholders in the target area. Despite that fact that a series of workshop and explanation session were provided, some stakeholders raised issues after construction had begun and that have to be managed. Another issue is management of physical matter. After the sidewalk was removed, drainage was found which was not expected during the design stage. Change in design was needed to avoid damaging the drainage.

Two types of discussion mechanism were adapted. One is to establish regular meeting with technical staff of concerned parties such as DPWT, PTI, MPWT, contractor, and consultant to share the information and issues and try to solve the problems. Other is to establish "Committee" which is composed of high ranking officials of concerned agencies and the villages in the target area. This committee is design to discuss issues which require approval such as changing the design.

Lesson Learned

It is important establish monitoring and management mechanism at the two different levels; one is high level where approval or decision making is required, the other is technical level through which daily activity shall be monitored.

CHAPTER 5 ACTIVITIES AFTER THE PROJECT

5.1 Authorization of Legal Documents

Authorization of legal documents remains as an uncompleted item of the Project. Counterparts have been trying to authorize Legal Documents of (1) to (4) as shown in the table below. It is expected to be issued soon. Legal Documents of (5) will authorize “D-LUP/ZC of the next area”, which is expected to be formulated in the proposed next Project.

Table 5.1 Legal Documents to be Authorized

Documents	Contents	Target Area	Provision of Systems	Provisions of Criteria
(1)	Prime Minister's Decree Development Master Plan of Vientiane Capital	61,600 ha		G-LUP/ZC
(2)	Ministerial Order Construction Management Regulation	Whole country	- Urban Planning Certificate - Building Permission - Committee - Countermeasures	
(3)	Ministerial Order Construction Management Regulation	Whole country	- Land-Development Permission - Countermeasures	
(4)	VTE Governor's Decision Urban Management Regulation	General Part	VTE	- Definitions, etc. - Countermeasures
		Specific Part	4,200 ha	D-LUP/ZC (Historic, Inner)
(5)	VTE Governor's Decision Urban Management Regulation	Specific Part	Next area	D-LUP/ZC (Next area)

Source: JICA Project Team

Enforcement works based on the new systems and regulations are expected to start after authorization.

5.2 Following Activities

Urban development activities, including small-scale building construction activities to large-scale land development projects, are implemented in and around the urbanized area in Vientiane Capital. It is very important to properly control these activities in order to create flourish and sustainable city and safety buildings in Vientiane Capital. The control methods consist of four items below:

- (a) proper control systems (such as permission system and countermeasures against violation),

- (b) reasonable Land Use Plan (LUP) and Zoning Code (ZC)
- (c) reasonable Building Code (BC)
- (d) qualified operation of (a), (b) and (c) above.

However, there is a lack of (a), (b), (c), and (d) in Vientiane Capital, and it has caused disordered urban development and unsafety buildings.

The Project formulated “new control systems” and “D-LUP/ZC covering Inner Zone”. It means (a) and (b) above are fulfilled. However, “formulation of BC (c)” and “qualified operation (d)” are still not yet realized.

It is eagerly expected by Vientiane Capital to enhance its capacity on “formulation of BC (c)” and “qualified operation (d)”. In addition, formulation of D-LUP/ZC covering the surrounding areas of Inner Zone is also expected.

Attachment 1

New Control System

New Control Systems of:
- Land Use,
- Land Development, and
- Building Construction

Project for Urban Development Management
Vientiane Capital, Lao PDR

1

Abbreviation (Organizations)

	Meaning & Explanation/Remark
MPWT	Ministry of Public Works and Transport
DHUP	Department of Housing and Urban Planning
PTI	Public Works and Transport Institute
VTE	Vientiane Capital
DPWT	Department of Public Works and Transport of VTE
OPWT	Office of Public Works and Transport of Districts in VTE
CMC	Construction Management Committee

2

Abbreviation (Technical Terms)

	Meaning & Explanation/Remark
LUZ	Land Use Zone such as Residential Zone and Commercial Zone.
LUP G- LUP D-LUP	Land Use Plan a map showing allocation of various Land Use Zones. General Land Use Plan Detail Land Use Plan
ZC G-ZC D-ZC	Zoning Code a set of building regulations from the viewpoint of city planning. General Zoning Code Detail Zoning Code
H	Building Height From the road level to the highest point of the building (excluding Lao traditional slope roof).
E	Land Use Ratio Floor area of the first floor. It is similar with BCR (Building Coverage Ratio) , but a little bit different.
COS	Land Use Coefficient Same with FAR (Floor Area Ratio)

3

We proposed items below “1” to “8” in order to improve control systems and regulations regarding:

- land use,
- land development activities, and
- building construction.

These proposals were reflected in the drafts of:

- G-LUP/ZC in Vientiane Capital
- Ministerial Order on Construction Management Regulation (Attachment 1)
- Vientiane Capital Governor’s Decision on Urban Management Regulation, including D-LUP/ZC of Historic Area and Inner Zone (Attachment 2)

1. Certification and Permission

(1) New system of “(U) Urban Planning Certificate” shall be established.

(2) “Construction Permission” shall be divided into to two steps of:

- “(L) Land-development Permission” and
- “(B) Building Permission”,

because they are different in stages and applicants in many cases.

When the project does not involve new construction of road, only “Building Permission” is required.

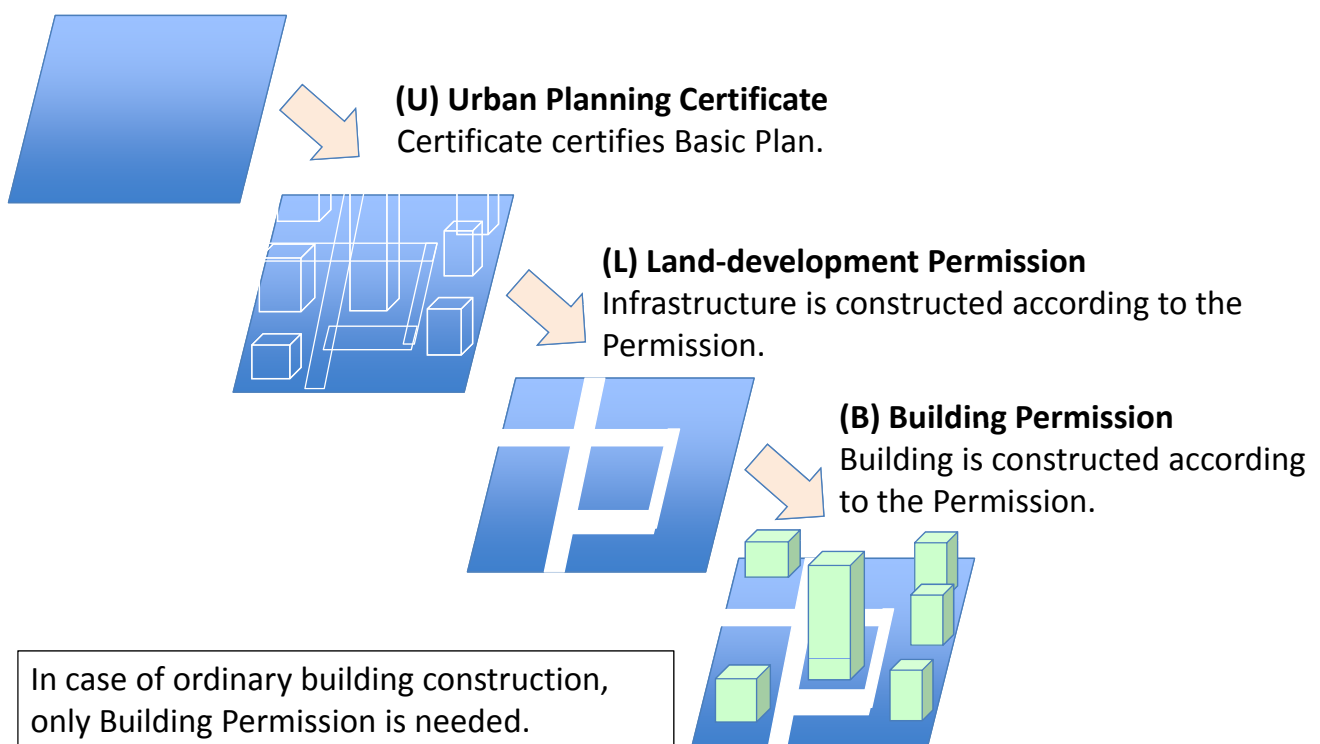
(3) Outline of three permission/certificate systems including “Land-development Standard”, which is used as criteria when the authority examines “(L) Land-development Permission”, is as shown in below.

In the table, VTE, DPWT, and OPWT mean:

- Vientiane Capital,
- DPWT of Vientiane Capital, and
- OPWTs in Vientiane Capital.

5

In case of large scale development, three steps of permission are needed.



6

Permission Items	(U) Urban Planning Certificate	Construction Permission	
		(L) Land-development Permission	(B) Building Permission
Target	Large Urban Projects as followings: - more than 5 ha in project area, - more than 30 m in building height of the tallest one, or - more than 10,000 m² in total floor area of buildings.	Project involving construction of new roads	Building construction and the like.
Applicant	Developer	Developer	Building owner
Area of application	Whole development area.	Whole development area or a part of the area. (*1)	Each building site. (*2)
Occasion to get permit	- After completion of basic plan, and - before starting detail design of infrastructure and buildings.	- After completion of detail design of infrastructure, and - Before starting construction work of infrastructure.	- After completion of detail design of a building, and - Before starting construction work of building.
Purpose	To examine whether basic plan of infrastructure and buildings complies with related standards and 15 items or not. It is helpful for developer to know the possibility of construction permission prior to starting detail design.	To examine whether each detail design of infrastructure , such as road, complies with related standards or not.	To examine whether each detail design of building complies with 15 items or not.

7

Permission Items	(U) Urban Planning Certificate	Construction Permission	
		(L) Land-development Permission	(B) Building Permission
Drawings to be attached to the application	Basic plan of infrastructure and buildings including: - Allocation and capacity of infrastructure, and - Use and volume of expected buildings.	Detail design of infrastructure including: - Detail structure of section of road, - Detail design of drainage, - Etc.	Detail design of building (*3)
Criteria	Land-development Standard and 15 items *Compliance in detail is examined in the process of (L) and (B).	Land-development Standard	15 items *Building Code will be checked in future.
Person to issue	Governor of Vientiane Capital or Provincial Governor	DG of DPWT or District Governor	DG of DPWT or District Governor

(*1) It is acceptable to apply for a part of (U), one after another, depending on the proceeding of development.

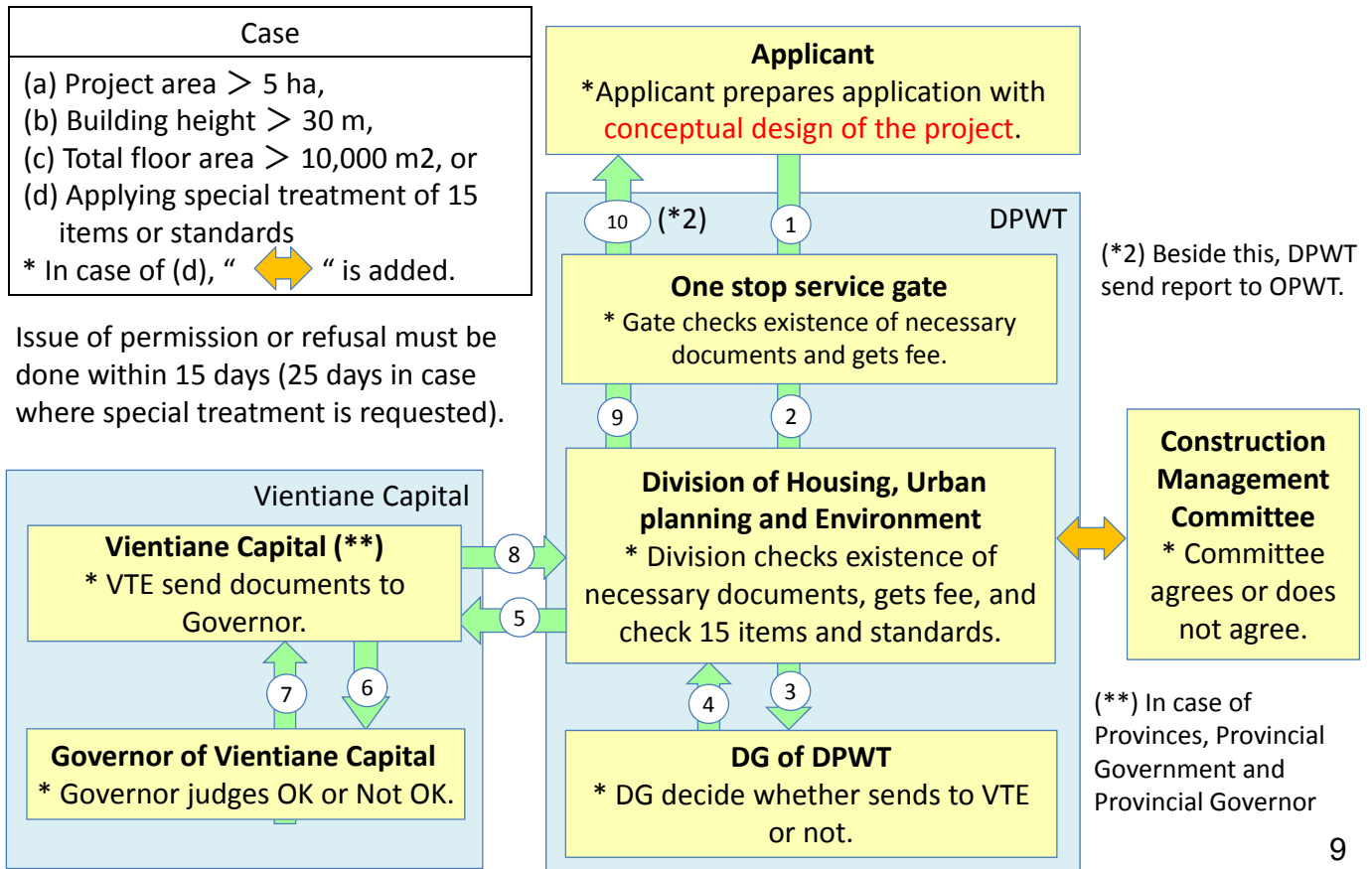
(*2) Application must be done for each building site.

(*3)

- 1) Application for construction permission attaching contact detail.
- 2) Copy of census or address certificate.
- 3) Copy of land ownership certificate.
- 4) Location plan and drawing or photo of the building.
- 5) General plan on land boundary, construction line and road line, distance from each side of the building to each line above, gateway with its width and length, drainage water plan, digging/filling land, tree planting, and so on.
- 6) Architectural and technical plan of construction.
- 7) Environmental protection measure or environmental impact evaluation.

8

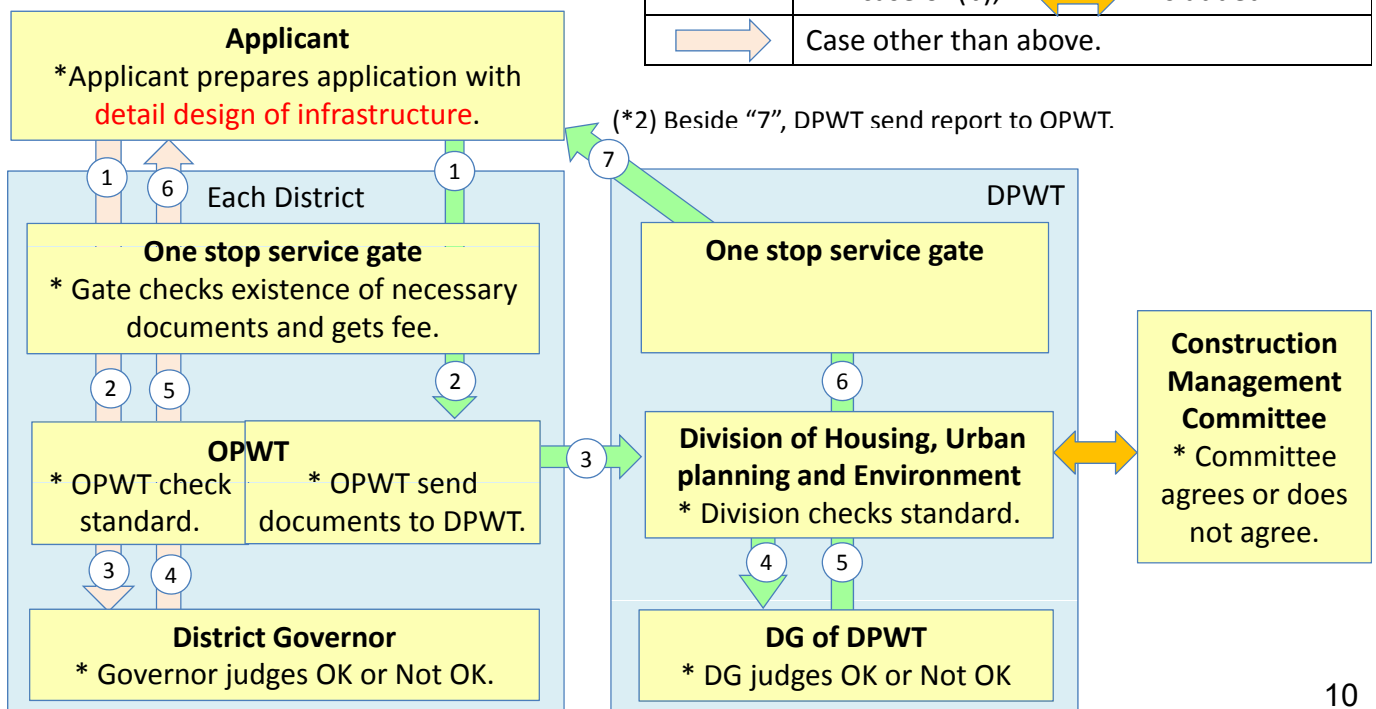
Procedure of **Urban Planning Certificate**



Procedure of **Land-development Permission**

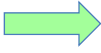
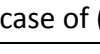

Issue of permission or refusal must be done within 15 days (25 days in case where special treatment is requested).

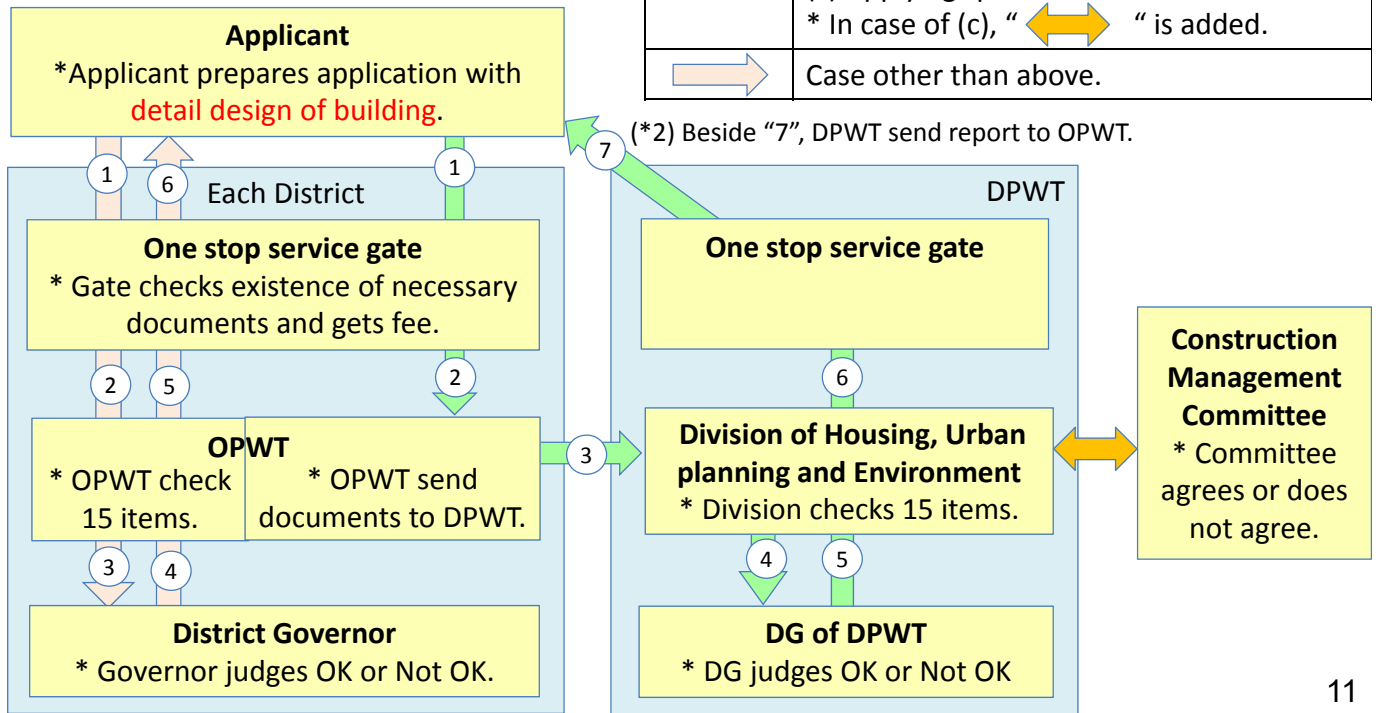
Legend	Case
→	(a) Total floor area > 1,000 m ² , (b) Applying special treatment of 15 items * In case of (b), “↔” is added.
↔	Case other than above.



Procedure of Building Permission

Issue of permission or refusal must be done within 15 days (25 days in case where special treatment is requested).

Legend	Case
	(a) Total floor area > 400 m ² , (b) Special use specified in the list, or (c) Applying special treatment of 15 items * In case of (c), "  " is added.
	Case other than above.



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Flow of Large-scale Development in Vientiane Capital

<Exception> Construction activity, which is implemented by the Government.

When someone intends to implement Large Urban Projects as followings:

- more than 5 ha in the project area,
- more than 30 m in building height of the tallest one in the project area, or
- more than 10,000 m² in total floor area of buildings in the project area,

(U) Urban Planning Certificate

When someone intends to implement "Land-Development" (construction activity involving construction of new roads),

(L) Land-development Permission

- (a) Developer constructs new infrastructure, such as road, in the development area, according to the plan that was attached in the permission.
- (b) Ownership of constructed infrastructure is transferred to the Vientiane Government. And Ownership of building sites is transferred to each building owner.

When someone intends to implement any of building construction activities as followings:

- Building construction
- Building repair
- Installation of electricity poles, telephone poles, pylons, water towers, fly-over bridges, and others,

(B) Building Permission

- (c) Each building owner construct a building.
(Sometimes, the developer itself constructs a building.)

12

- (1) This procedure of (U) (L) and (B) will be required for every project:
 - (a) excluding projects, which are implemented by the Government itself.
 - (b) including projects, which are implemented in SEZ or Concession Project.
- (2) In the process of (L), Plan of infrastructure is examined whether it conforms to Land-development Standard, or not.
- (3) In Concession Project, Concession Right (right to use land for 50 to 100 years), which was given to the developer, will be is divided into pieces for each building site, and will be transferred to each building owner.
- (4) We can not expect the developer to maintain infrastructure in the development area for the whole Concession term (50 to 100 years), because all right to use building sites will be transferred from the developer to others. Therefore, it is necessary for Vientiane Capital to receive ownership of infrastructure from the developer.

Land-Development Standard

(The use of scheduled buildings etc.)

1. The use of scheduled buildings etc. shall conform to the restriction on such use set forth in:
 - (a) G-LUP/ZC,
 - (b) D-LUP/ZC, or
 - (c) Proposal, which is described in the application.

(Roads, parks, open spaces and other vacant spaces for public use)

2. Roads, parks, open spaces and other vacant spaces for public use shall be of scale and structure, and be properly located, so that they will cause no inconvenience from the viewpoints of environmental preservation, disaster prevention, traffic safety and the efficiency of business activities considering the following items.
 - (a) Scale and shape of the development area and the conditions of its surroundings;
 - (b) Topography of land in the development area and nature of the ground;
 - (c) Uses of scheduled buildings, etc;
 - (d) Scale and layout of the sites of scheduled building, etc.
 - (e) Proposal of regulation items, such as Land Use, H (Maximum building height) , E (Land use ratio), and COS (Land use coefficient), if it is attached to the application form.

(Sewers and other drainage facilities)

3. Sewers and other drainage facilities shall be designed considering the following matters with structure, capacity and appropriate layout, and will not cause any damage in the development areas and surrounding areas by inundation etc.

- (a) Precipitation in the relevant area;
- (b) Matters listed in sub-items (a) through (e) of the previous paragraph and conditions in the discharge destination.

Wastewater including:

- black water (wastewater from toilet) and
- grey water (wastewater from kitchen, shower, washing machine, etc).

must be discharged according to the table below.

Building	Buildings other than the right	Residential building with total floor area less than 300 m ² , in the development area with 5 ha or less
Location of the development area		
in the service area of public sewerage system	To the public sewerage system.	
out of the service area of public sewerage system	To the drainage after treatment less than 60 mg/liter in effluent BOD (Biochemical Oxygen Demand).	the septic tank in accordance with "Standard of Septic Tank for Household" shall be regarded as a method of treatment in the left.

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(Water supply facilities)

4. Water supply facilities shall be designed considering the matters listed below with structure, capacity and appropriate layout that will not hinder anticipated demand in the relevant development areas.

- (a) Scale and shape of the development area and the conditions of its surroundings;
- (b) Topography of land in the development area and nature of the ground;
- (c) Uses of scheduled buildings, etc;
- (d) Scale and layout of the sites of scheduled building, etc.

(Schools and other facilities)

5. Schools and other facilities for the public interest and of scheduled buildings, etc. in the development areas shall be distributed in a manner that improve convenience in the development areas and the preservation of environment in the development areas and surrounding areas, considering the purpose of the relevant development activities.

(Ground improvement, etc.)

6. Design shall be established so that ground improvement, construction of retaining walls or drainage facilities or other necessary measures for securing safety are taken with regard to the purpose of preventing disasters caused by ground sinkage, landslides or flooding or others.

<Remark>

In the process of Land-development Permission, it is not required for the developer to obtain agreement from all landowners involved in the project. But it is needed before implementation of the project.

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2. Statements of Criteria

- (1) Criteria (LUP/ZC) shall be stated in a manner of identifying:
- (a) **Mandatory provisions, and**
 - (b) **Recommendable provisions.**

(2) Each role of regulation and guideline shall become clear.

Policy in detail is as shown below.

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Various Criteria

Target System component	Land Development Area (Involving new road, or more than 1ha)	Buildings, etc.		
Regulations	Land Development Standard (*1) & LUP/ZC	LUP/ZC (*2)	Building Code (*3)	Other Codes (*4)
Countermeasures against violation	Countermeasures are provided in each legislation.			
Procedure	Urban Planning Certificate	Construction Permission based on both: - City Planning Law and - Construction Law		Other Permissions

Based on **City Planning Law**

Based on **Construction Law**

Based on **Other Laws**

(*1) Land-Development Standard consists of provisions how to design infrastructure, such as roads, drainage and park, in the development area.

(*2) LUP/ZC are authorized as a part of city plan.

(*3) Building Code consists of building regulations mainly from the viewpoint of safety, such as structural stability, fire safety, barrier free, etc.

(*4) Other Codes include regulation on gas station, etc.

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Statements in Criteria

Current Regulations

So many **moratorium provisions. They are not clear whether they are mandatory or recommendable.**
 Take for example,
 (a) Statements of building use control are not clear.
 (b) Parking lot obligation is very sever for many buildings.

The authority **can not automatically judge** whether a building plan is OK or Not OK.

Many legal buildings, which does not comply with some prescribed requirements, appear.

It causes difficulty in administration on countermeasures against illegal buildings.

New Regulations

A set of **mandatory provisions (*) and recommendable provisions. They are clearly identified.**

Difficult judgment is done by Construction Management Committee through special treatment procedure.

The authority **can automatically judge** whether a building plan is OK or Not OK.

It is easy not only for authority but also people to judge whether the building complies with requirements or not.

It makes administration on countermeasures against illegal buildings easier.

(*) In case of mandatory provision, every building must meet prescribed requirements unless it gets special treatment.

Regulations and Guideline

“Law” and “Documents mentioned in the Law”

the Law

the Ministerial Order

the Governor’s Decision (*khoh tok lon*)
 - Contents are regulations (*kot la-biab*). -

- (1) Lower documents provide details of obligations mentioned in the upper documents.
- (2) However, **it is allowed for lower documents to provide:**
 - additional obligations,
 - severer obligations, or
 - relaxation of obligations.**within certain limitation given by the Local Governance Law, etc.**

“Documents for administration”

Document published by DG of DPWT:
 - Contents are guideline (*bot-nenam*). -

- (1) **It is not allowed for DPWT documents to provide:**
 - additional obligations,
 - severer obligations, or
 - relaxation of obligations.
- (2) DPWT is expected to publish **explanatory documents** for the administration of the system.

Countermeasures can be adapted when the building does not comply with regulations provided in “Law” or “Documents mentioned in the Law”. “Documents for administration” itself is not regulation, but is used when it is judged whether the building complies with regulations or not.

3. Countermeasures

(1) Relationship between permission and countermeasures

It shall be clearly stated that countermeasures can be done with the reason that the building does not comply with LUP/ZC, regardless the issue of the permission. And necessary provisions shall be provided.

(2) Power to conduct countermeasures

- (a) Obligations of related people, and
- (b) Power of countermeasures, which is given to the authorities, shall be clearly stated in the regulation.

Outline of new system of the countermeasures is as shown below.

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LUP/ZC, Permission, and Countermeasures - City Planning Law (CPL) -

(1) People must comply with City Plan. CPL Article 5
City Plan includes LUP and ZC. CPL Article 2

(2) Construction activities, such as below, needs permission. LUP and ZC are criteria for permission.

- Building construction
 - Building repair
 - Digging or filling of land
 - Installation of electricity poles, telephone poles, pylons, water towers, and fly-over bridges, and others
- CPL Article 27

Statement (1) says that:
- not only construction activities necessary for permission,
- but also other construction activities, are obliged to comply with LUP and ZC.

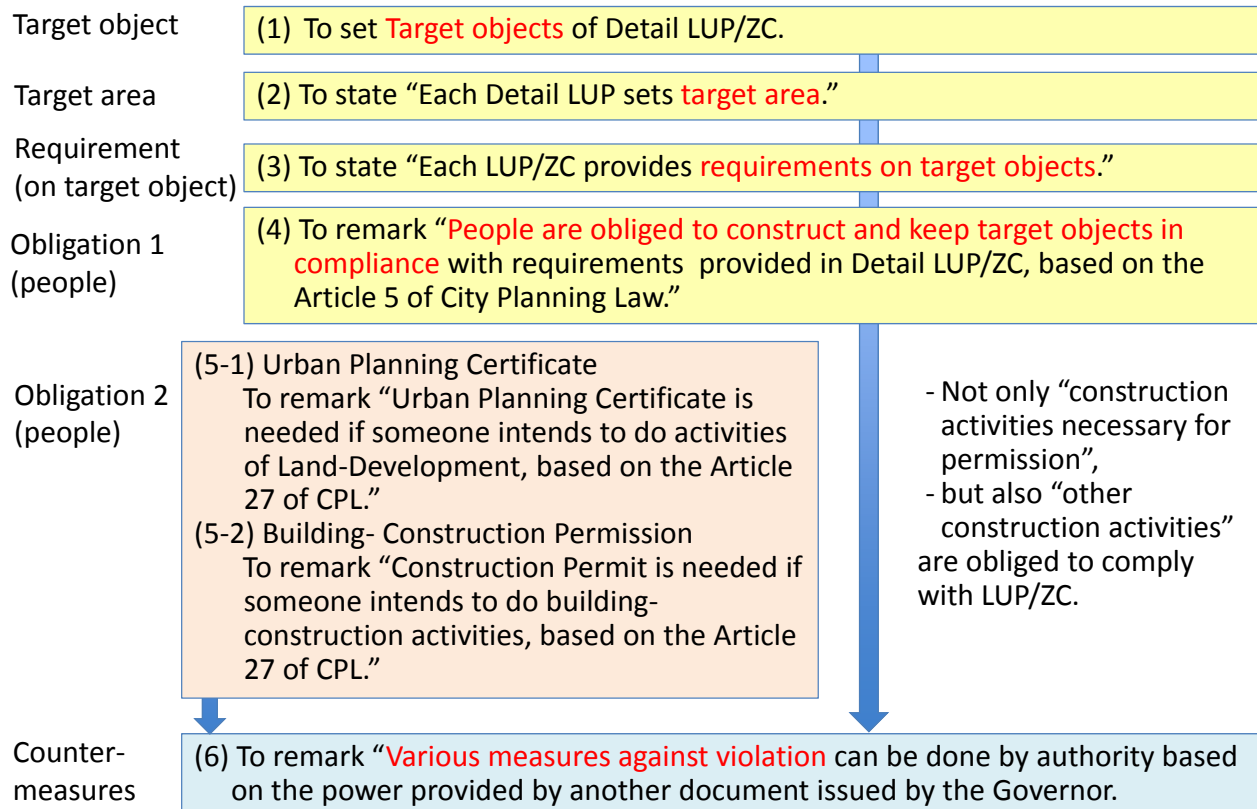
(3) Against violations, various measures below can be done.

- Compensation, if it causes damages to the others' property. CPL Article 49
- Fines, if it is not authorised (*). CPL Article 50
- **Demolition, if it does not comply with City Plan, and is not authorised (*).** CPL Article 50
- Punishment with Penal Law, if it causes damages to life or health of others. CPL Article 51
- Suspension of business or withdrawal of license, if it causes severe damages to the others' property. Article 52
- Additional measures, such as demolition, if it causes severe damages to the others' property. Article 52

(*) If it has permission and its construction work complies with LUP/ZC, it is considered to be "Authorised".

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LUP/ZC, Permission, and Countermeasures - Detail LUP/ZC -



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Countermeasures against Violations

- (1) Obligations of related people, and
 (2) Power of authorities (DPWT) against violations, shall be provided.

Obligations	
Land owners	must keep the land
Building owners	must keep the building
Designers	must design the building
Builders	must construct the building
Tenants and occupants	must use the building

In compliance with the requirements provided in Article 4.



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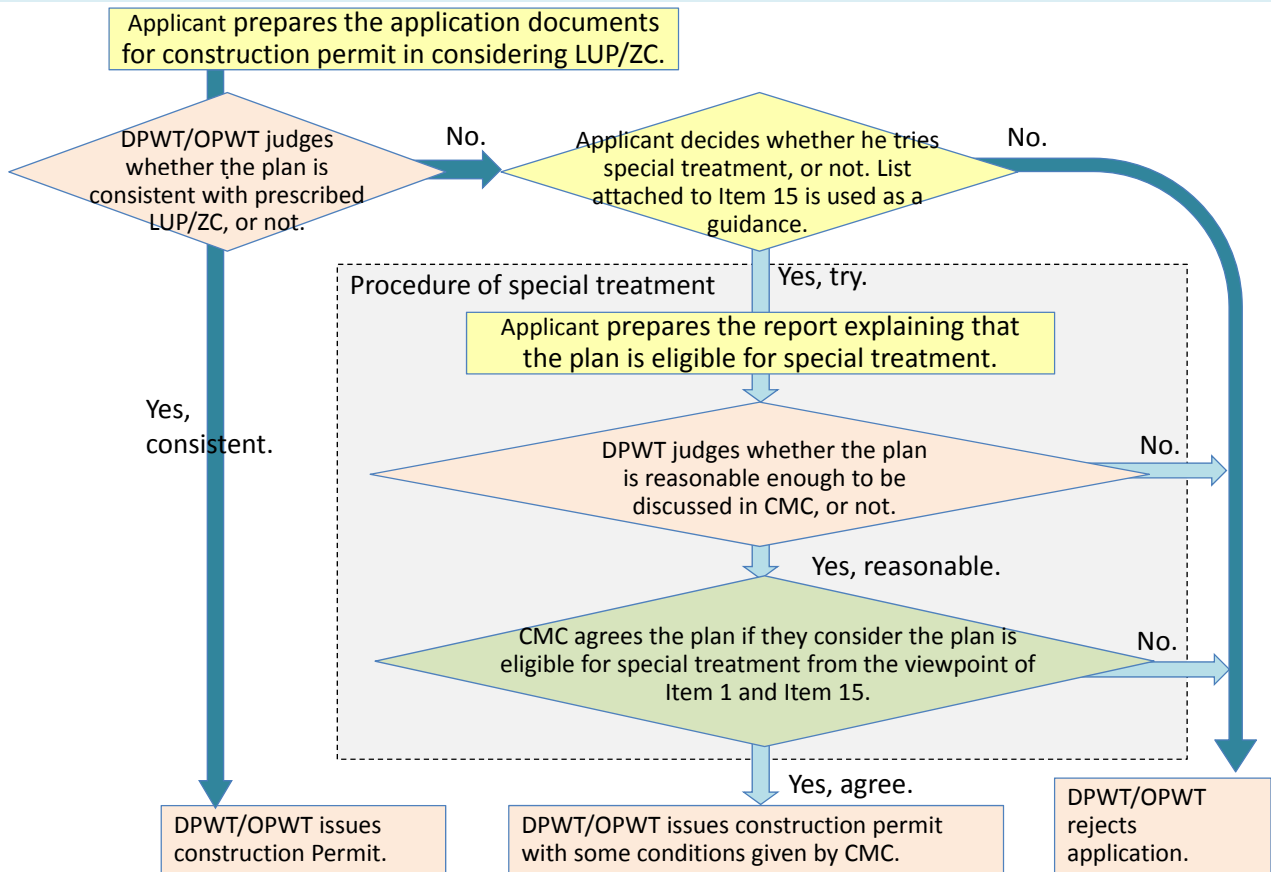
Powers		
DPWT has a power	(1) To request a report, (2) To enter the building, and inspect or examine, and to question (3-1) To order: - suspension of the construction work, - restriction of use of the building, - demolition of the building, etc. providing a reasonable grace period. (3-2) To request related suppliers to stop their supply of electricity, water, gas, or telephone, (4) To remove the illegal objects from the reservation area and road area,	to the related people above, if the building is likely violating the requirements provided in Article 4.
	(5) To execute what DPWT ordered, by DPWT it self, in cases where orders are not implemented within the grace period.	

4. Special Treatment

Procedure of **Special Treatment through the Construction Management Committee** shall be established for the difficult judgment.

Outline of new system of the special treatment is as shown below.

Special Treatment in Permission Process



5. Projects in SEZ, etc.

It shall be clear how to handle SEZ projects, etc.

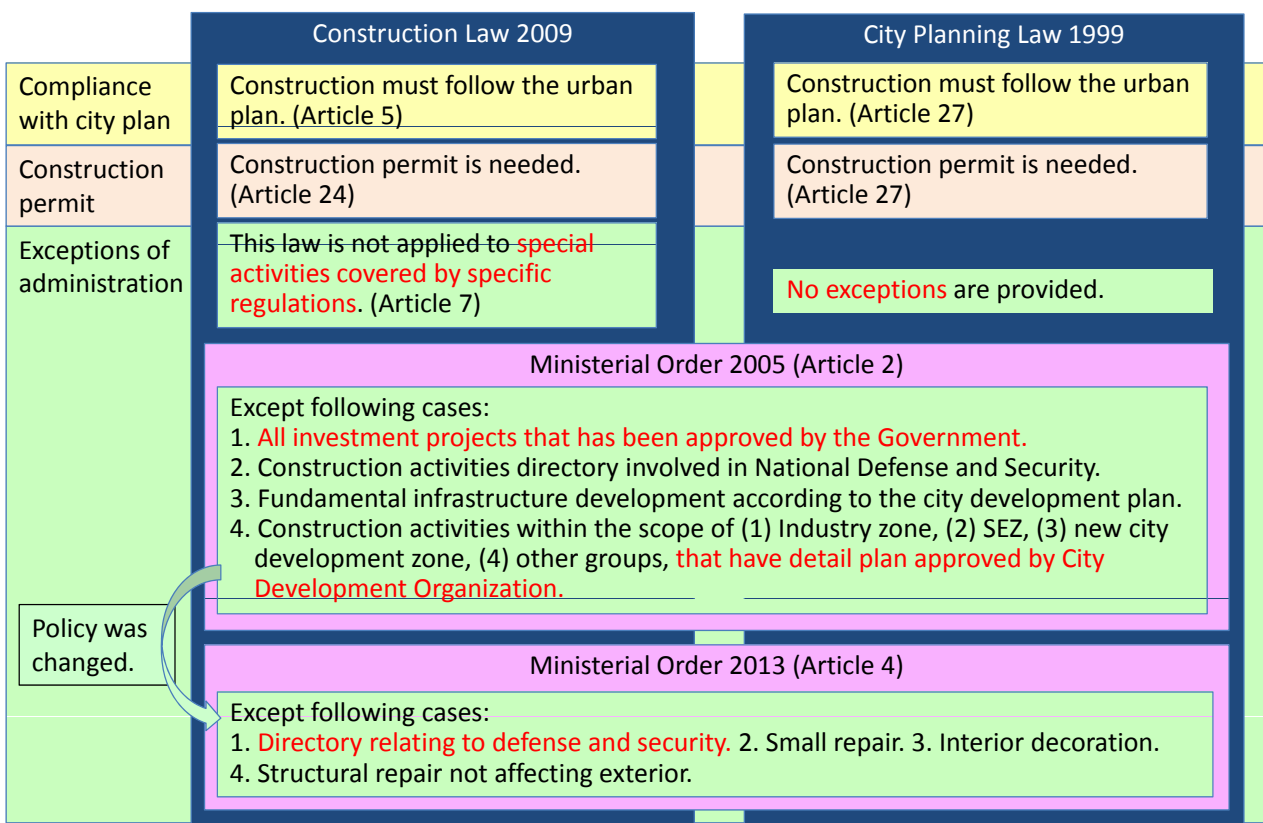
Outline of new policy is as shown in below.

**“Projects in SEZ” and “Concession projects approved by the Central Government”
in Construction Law and City Planning Law.**

- (1) Exceptions are designated by the Ministerial Order.
- (2) Construction activity directory relating to defense and security, for example, is listed up in the list of exceptions in the Ministerial Orders of both 2005 and 2013.
- (3) Construction activities in SEZ and the like were listed up in 2005. Concession projects approved by the Government were also included “the like”.
- (4) Notwithstanding (3), SEZ and the like were not listed up in 2013. The policy on SEZ and the like, was changed in 2013.
- (5) Eventually, it is needed for construction activities in SEZ and the like (including concession projects approved by the Government) to get construction permit from DPWT/OPWT.

Provision regarding exceptions is necessary for City Planning Law, too.

**“Projects in SEZ” and “Concession projects approved by the Central Government”
in Construction Law and City Planning Law.**



Application to Projects in SEZ and Special Projects in Vientiane Capital

<Situation>

- G-LUP/ZC covers 61,600 ha and be effective for 61,600 ha.
- D-LUP/ZC are issued for some areas in 61,600 ha.
- There are some SEZ (Special Economic Zone or Specific Economic Zone) in 61,600 ha.
- There area some SP (Special Projects) other than SEZ in 61,600 ha.

<Administration>

- Regulations that are applied to each project are as shown in the figure of the next page.
- C-CMC will approve special treatment for some projects in SEZ and some SP, of which plan does not meet some prescribed regulations provided in LUP/ZC.
 - P-CMC will approve special treatment for some SP other than (i), of which plan does not meet some prescribed regulations provided in LUP/ZC.
- Even in SEZ, it is required for developers and building owners to get construction permit from DG of DPWT.
- Countermeasures against violations are handled by DG of DPWT and District Governor.

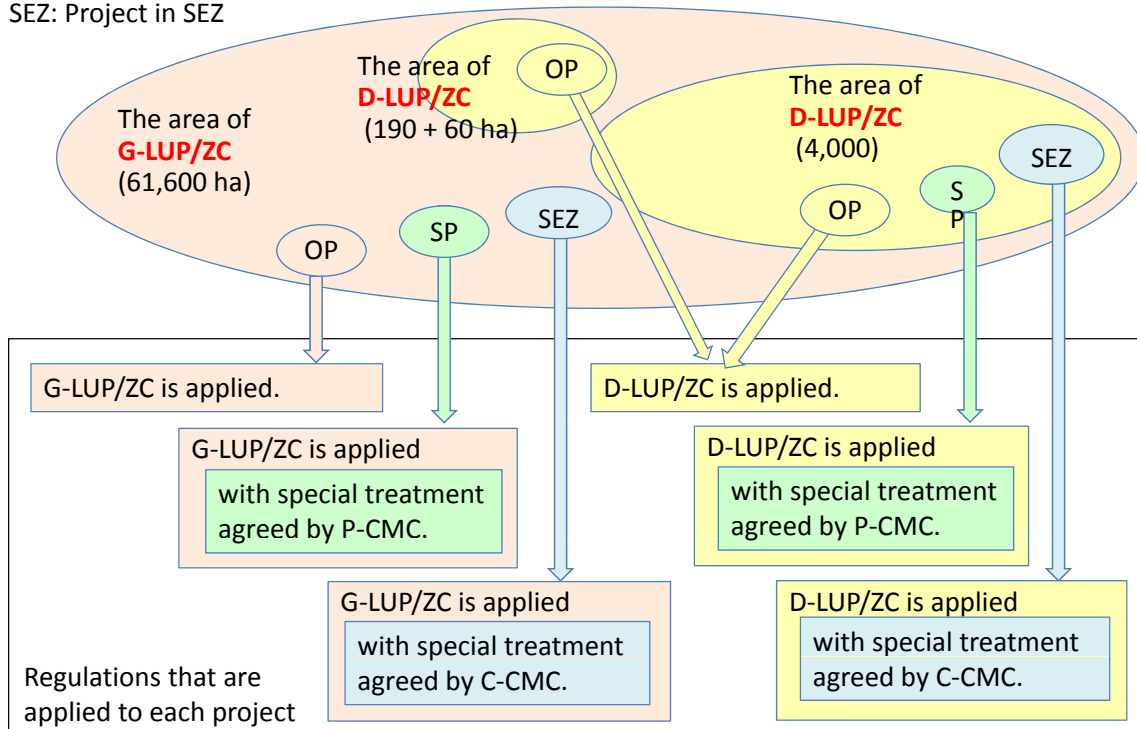
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Application to Projects in SEZ and Special Projects

OP: Ordinary Project

SP: Special Project (such as some concession project)

SEZ: Project in SEZ



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6. Legal Documents

There are some legal documents to control land use, land-development activities, and building construction as shown in below.

In order to improve current systems and regulations,

- “Ministerial Order on Construction Management Regulation (2005/2013)” shall be revised,
- “G-LUP/ZC of Vientiane Capital (2002/2007)” shall be revised, and
- “Urban Management Regulation of Vientiane Capital with attachment of D-LUP/ZC of (1) Historic Area and (2) Inner Zone” shall be established, and
- (3) D-LUP/ZC of the next area shall be established in near future.

Outline of new composition of legal documents is as shown in below.

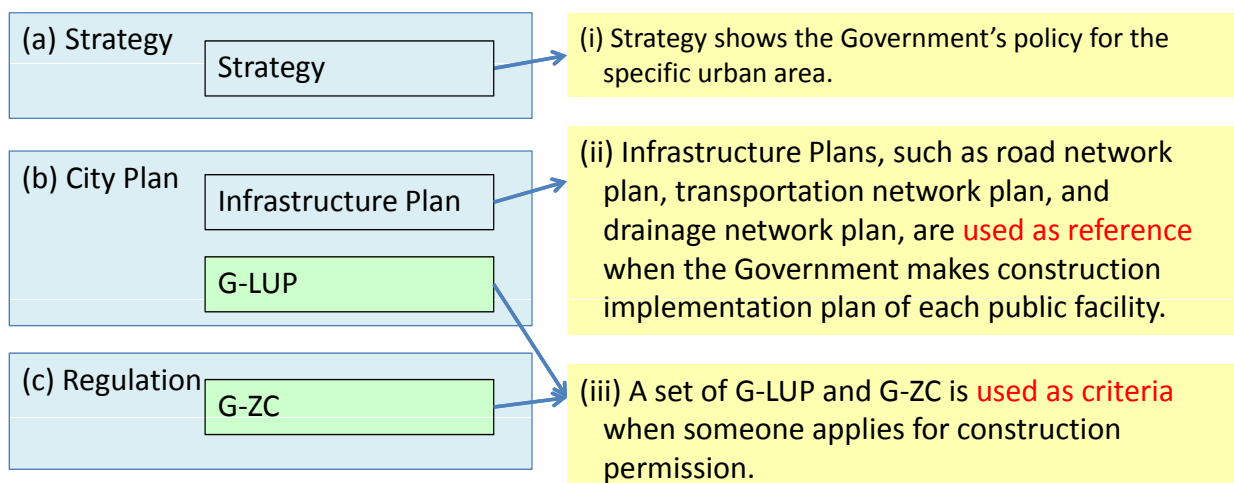
33

Documents of City Plan in Lao PDR

Based on the City Planning Law (1999) and its Ministerial Order (2006), the Governor decides:

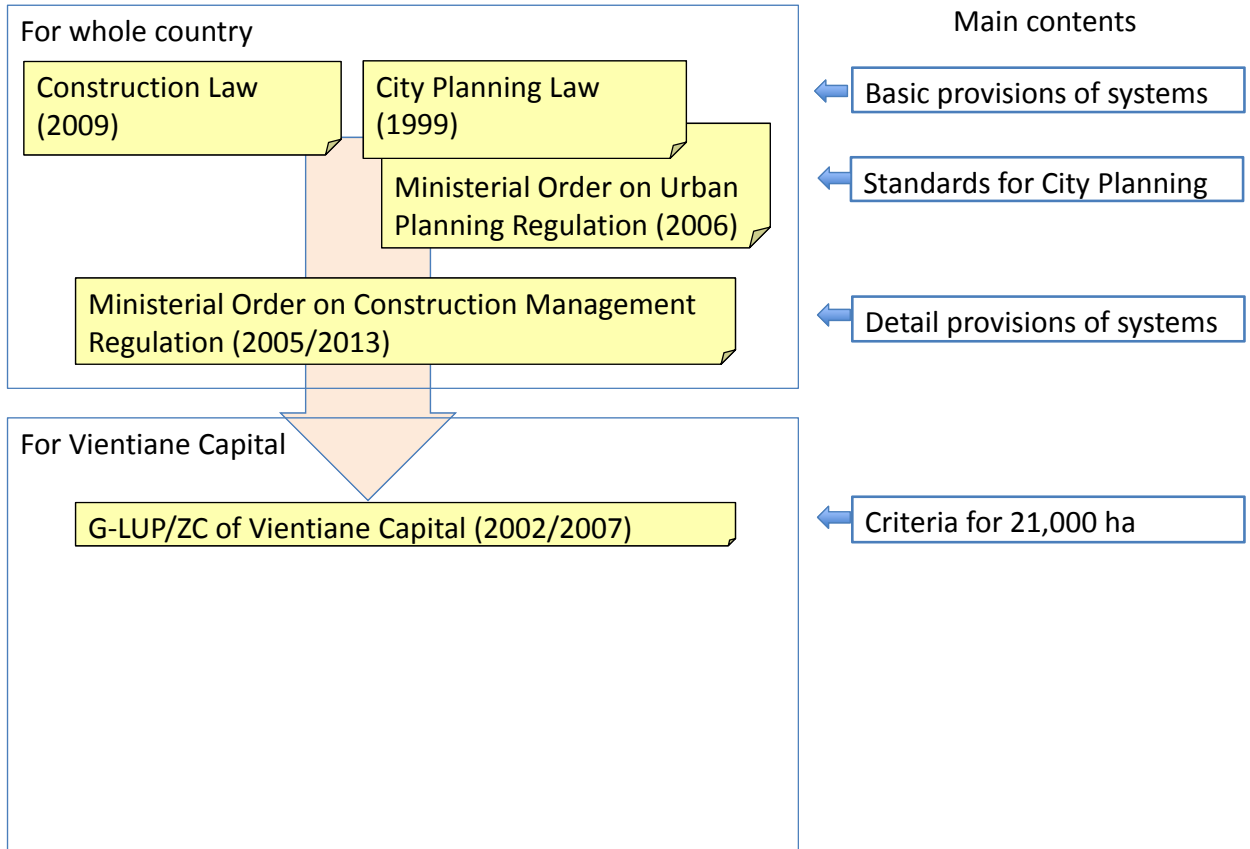
- (1) General City Plan for each urban area,
(General City Plan have been decided for more than 100 urban areas in Lao PDR.)
- (2) Detail City Plan if necessary.
(Detail City Plan have not yet decided in Lao PDR.)

General City Plan consists of (a), (b) and (c).



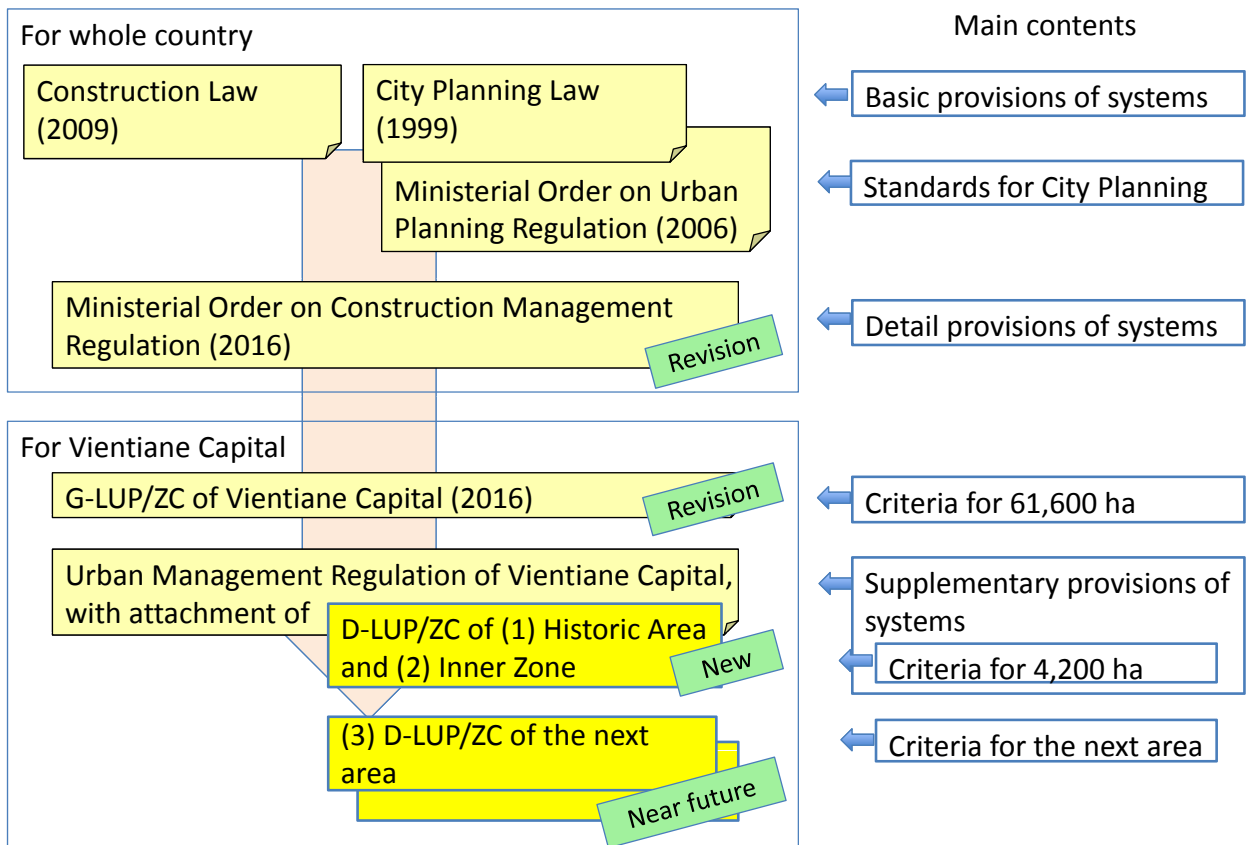
34

Official Documents for Control of Land Use and Building (Existing)



35

Official Documents for Control of Land Use and Building (New)



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7. New General LUP/ZC

(1) G-LUP/ZC (Current)

Current G-LUP/ZC, which were issued in 2002 and 2007, has some problems as shown below, in its administration.

- (a) Many development activities take place **outside of Land Use Plan area (21,000 ha)**.
- (b) It is needed to review some regulations of ZC, because of:
 - Difficulty for understanding, and
 - **Excessive requirements** for ordinary buildings.
- (c) Many buildings were constructed **not complying with prescribed LUP and ZC**. (both legal and illegal)

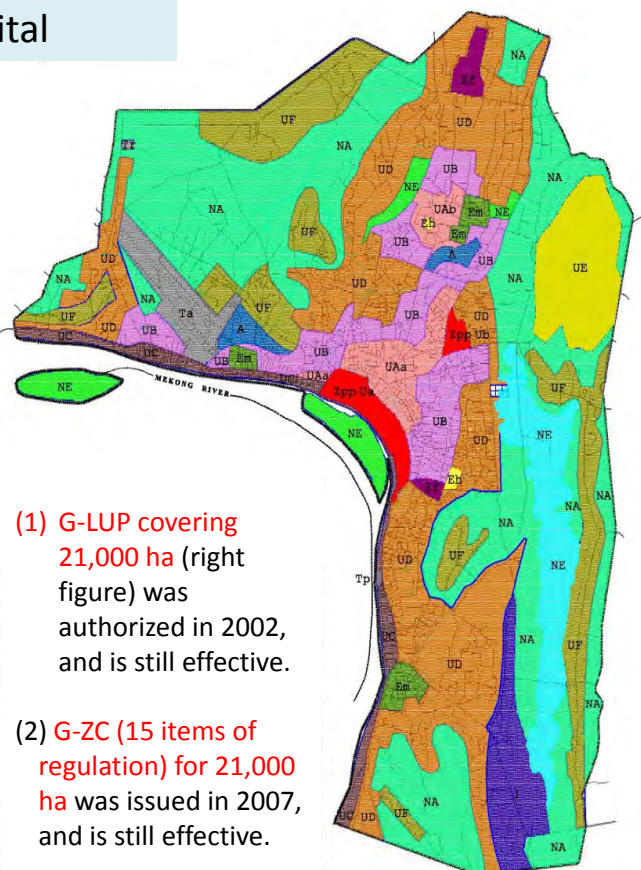
Therefore, it is needed to revise it.

Outline of Current G-LUP/ZC is as shown in below.

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Current G-LUP/ZC of Vientiane Capital

No.	LEGEND	Land Use Zone	ha
1	ZPP-Ua	Historic-Town Conservation Zone	180
2	UAa	Administration-and-Trade Center Zone	399
3	UAb	New Central Zone	183
4	ZPP-Ub	Ancient-Site Conservation Zone	50
5	UB	Zone of Surroundings of Central Urban Area	1263
6	UC	Mekong Riverbank Zone	380
7	UD	Zone of Surroundings of Urban Area	4597
8	UE	City-Expansion Zone	856
9	UF	Zone of Villages surrounded by Rice Field	1646
10	T	Transport Zone	390
11	I	Industrial Zone	220
12	NE	Reservation Zone	1407
13	NA	Agricultural Zone	8855
14	A	Zone of Rice Fields surrounded by Built-up Area	79
15	Em	Military Zone and Public Security Zone	245
16	Ef	Education Zone	163
17	Eh	Public Health Zone	37
Total			20950



(1) G-LUP covering 21,000 ha (right figure) was authorized in 2002, and is still effective.

(2) G-ZC (15 items of regulation) for 21,000 ha was issued in 2007, and is still effective.

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General Land Use Zones 2002 (1/2)

Category	Legend	Name of Zone	H (m)	E (%)	COS
Central Urban Area	ZPP-Ua	Historic-Town Conservation Zone	12	75	2.5
	ZPP-Ub	Ancient-Site Conservation Zone	7	50	0.7
	UAa	Administration-and-Trade Center Zone	26	75	2.5
	UAb	New Central Zone	26	75	2.5
Surroundings of Central Urban Area	UBa	Zone of Surroundings of Central Urban Area within Aircraft Flying Area	*	60	1.5
	UBb	Zone of Surroundings of Central Urban Area	20	60	1.0
	UCa	Mekong Riverbank Zone within Aircraft Flying Area	10	50	1.0
	UCb	Mekong Riverbank Zone	10	50	1.0
Surroundings of Urban Area and Suburb	UDa	Zone of Surroundings of Urban Area within Aircraft Flying Area	7	40	0.7
	UDb	Zone of Surroundings of Urban Area relevant to Agricultural Activities	15	50	1.0
	UDc	Zone of Surroundings of Urban Area which will expand	15	50	1.0
	UF	Zone of Villages surrounded by Rice Field	10	40	1.0

* Value is determined by another regulation.

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General Land Use Zones 2002 (2/2)

Category	Legend	Name of Zone	H (m)	E (%)	COS	
City-Expansion Area	UE	City-Expansion Zone	23	50	1.0	
Minor Zones and Specific Land Use Zones	NE	Reservation Zone	-	-	-	
	I	Industrial Zone	15	30	2.0	
	T	Transport Zone				
			Ta : Air Transportation Zone Tf : Train/Rail Transportation Zone Tp : Sea Transportation Zone Tr : Land Transportation Zone	-	-	-
	E	Service Zone	Ef: Education Zone Eh: Public Health Zone Em: Military Zone and Public Security Zone	-	-	-
	NA	Agricultural Zone		-	-	-
	A	Zone of Rice Fields surrounded by Built-up Area	-	-	-	

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15 items of G-ZC 2007

15 items	Application
1. General features	All Zones
2. Activities to be permitted and to be prohibited	All Zones excluding Zone T and E.
3. Special case to be permitted	
4. Gateway and road	All Zones excluding Zone T, E, NE, NA, A
5. Technical Infrastructure network	
6. Feature and size of site	
7. Distance from road boundary	
8. Distance from site boundary	
9. Distance among buildings in a site	
10. Land use ratio (E)	
11. Building height (H)	
12. Land use coefficient (COS)	
13. External feature of building	
14. Fence or wall	
15. Parking lot and open space	

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(2) G-LUP/ZC (New)

(a) New G-LUP shall cover 61,600 ha.

(b) Development Control Policy shall be set in considering characteristics of:

- Urbanized area (ZPP, UA, UB, UC, UD, UF, UEa) of 21,600 ha,
- Urbanizing area (UEb, UEi) of 12,800 ha, and
- Urbanization control area (T, E, N, NE) of 27,200 ha.

(c) New G-ZC shall be provided in a set of new 15 items below.

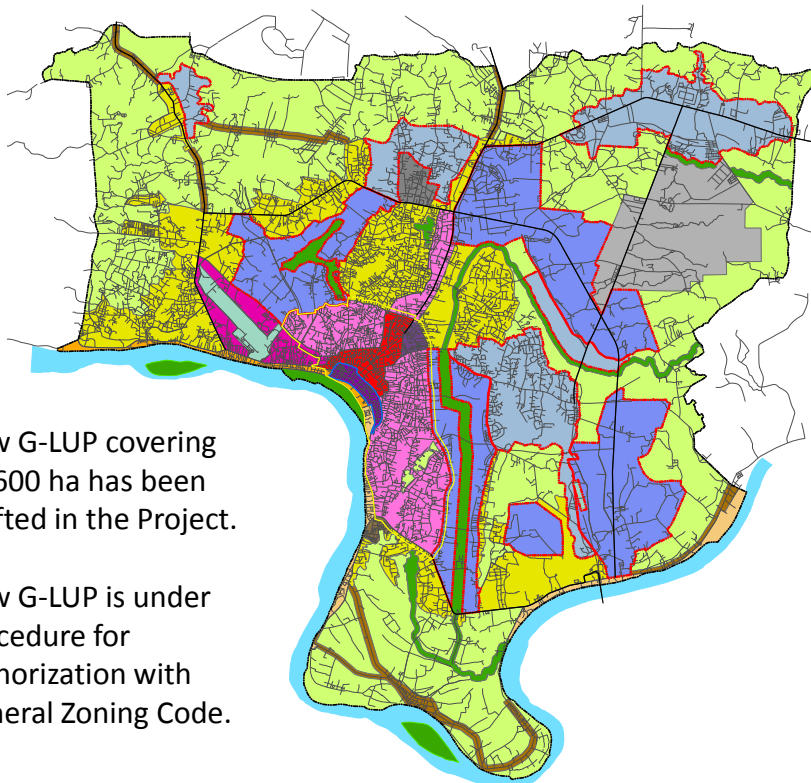
1. Development/Preservation Policy of the Zone
2. Land Use
3. Technical Network
4. Road and Gateway
5. Characteristic of Site
6. Distance from Site Boundary
7. Distance among Buildings in a Site
8. Road, Reservation Area, and Structure
9. Building Height (H)
10. Land Use Ratio (E)
11. Land Use Coefficient (COS)
12. External Feature
13. Parking lot
14. Vacant Space and Tree Planting
15. Special Treatment

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(d) Guideline, which provides supplementary information, shall be provided together.

Outline of New G-LUP/ZC is as shown in below.

G-LUP/ZC (New)



New G-LUP covering 61,600 ha has been drafted in the Project.

New G-LUP is under procedure for authorization with General Zoning Code.

Land Use Zones	H	E	COS
Zpp-Ua : 193 ha	20	75	2.0
Zpp-Ub : 109 ha	7	50	0.7
UAa : 512 ha	26	60	4.0
UBa : 735 ha	20	60	1.5
UBb : 3,345 ha	20	60	1.5
UCa : 295 ha	10	50	1.0
UCb : 582 ha	10	50	1.0
UDa : 55 ha	7	40	0.7
UDb : 8,319 ha	15	50	2.0
UF : 1,195 ha	10	40	1.0
UEa : 6,308 ha	23	50	3.0
UEb : 9,665 ha	-	-	-
UEi : 3,069 ha	15	40	1.5
T : 432 ha	-	-	-
Ef : 292 ha	-	-	-
Em : 82 ha	-	-	-
N : 24,476 ha	10	-	-
NE : 1,946 ha	-	-	-
Total = 61,608 ha	-	-	-

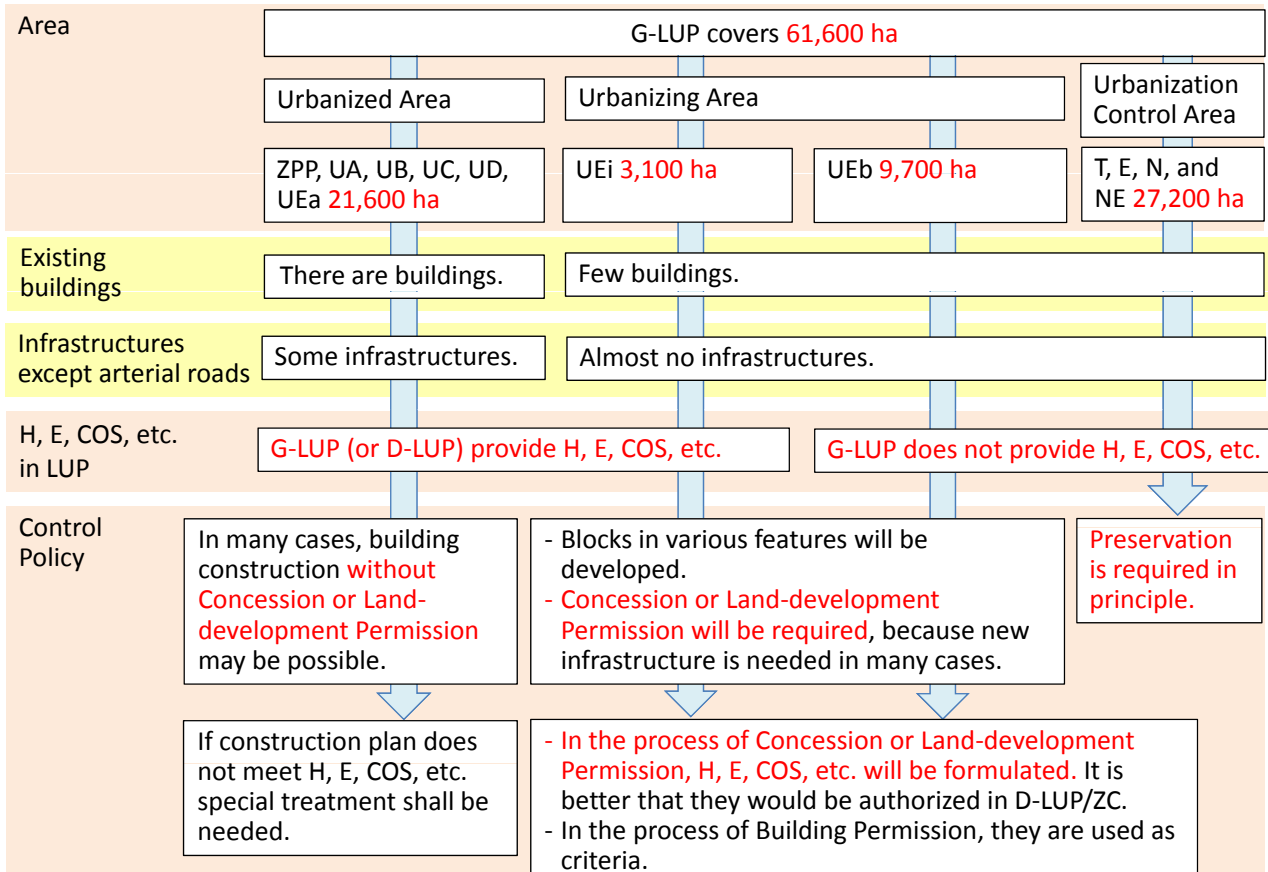
General Land Use Zones, and Values of H, E and COS

Zone		ha	H (m)	E (%)	COS	
Urbanized Area	ZPP-Ua	Historic-Town Conservation Zone	193	20	75	2.0
	ZPP-Ub	Ancient-Site Conservation Zone	109	7	50	0.7
	UA	Administration-and-Trade Center Zone	512	26	60	4.0
	UBa	Zone of Surroundings within Aircraft Flying Area of Central Urban Area	735	20	60	1.5
	UBb		3,345	20	60	1.5
	UCa	Mekong Riverbank Zone within Aircraft Flying Area	295	10	50	1.0
	UCb	Mekong Riverbank Zone	582	10	50	1.0
	UDa	Zone of Surroundings within Aircraft Flying Area of Urban Area	55	7	40	0.7
	UDb	relevant to Agricultural Activities	8,319	15	50	2.0
	UF	Zone of Villages surrounded by Rice Field	1,195	10	40	1.0
	UEa	City-Expansion Zone	6,308	23	50	3.0
(*)	UEb	Urban Development Promotion Zone	9,665	-	-	-
	UEi	Industry Development Promotion Zone	3,069	15	40	1.5
Urbanization Control Area	N	Agricultural and Forestry Zone	24,476	10	-	-
	NE	Prohibited Zone	1,946	-	-	-
	T	Transport Zone	432	-	-	-
	E (Ef, Em)	Service Zone	374	-	-	-

(*) Urbanizing Area

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Development Control Policy of G-LUP/ZC and D-LUP/ZC



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8. Establishment of D-LUP/ZC

Current Law says,

- (a) "People must comply with **City Plan**." in Construction Law (2009) Article 5 and City Planning Law (1999) Article 27, and
- (b) "City Plan consists of General City Plan (**G-LUP/ZC**) and Detail City Plan (**D-LUP/ZC**)." in Ministerial Order on City Planning Regulation (2006).

Current City Plan of Vientiane Capital does not have D-LUP/ZC. Therefore, D-LUP/ZC shall be established.

In regarding G-LUP/ZC and D-LUP/ZC, wherever D-LUP/ZC has been authorized, D-LUP/ZC will be the regulation that the people must comply with, instead of G-LUP/ZC.

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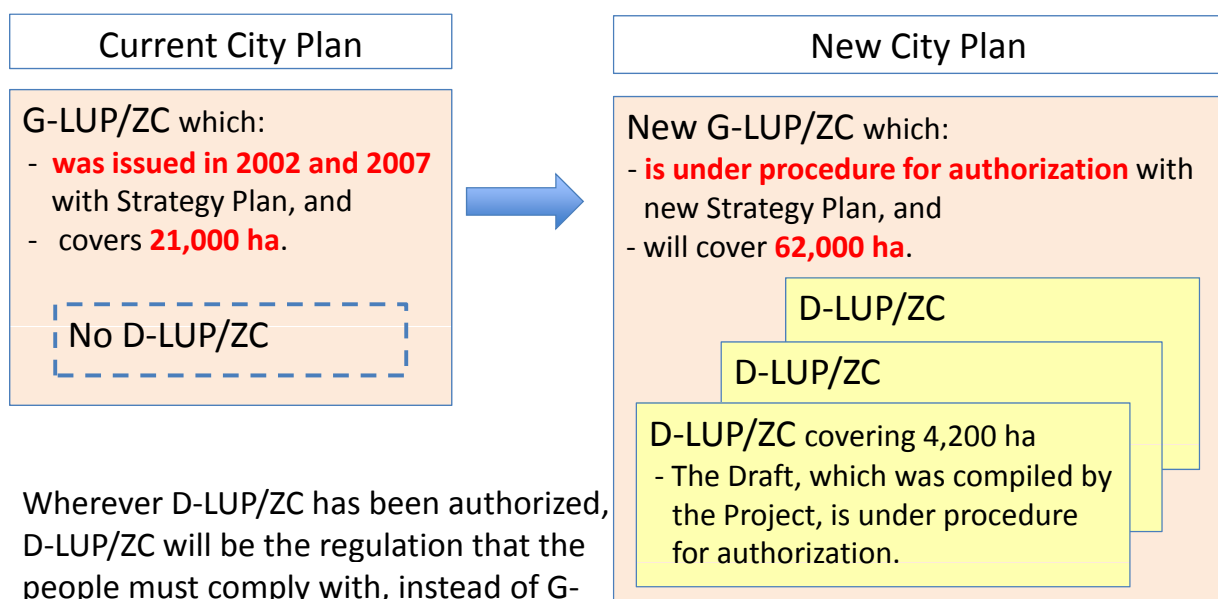
G-LUP/ZC and D-LUP/ZC in Vientiane Capital

People must comply with **City Plan**.

- Construction Law (2009) Article 5 and City Planning Law (1999) Article 27 -

City Plan consists of **G-LUP/ZC** and **D-LUP/ZC**.

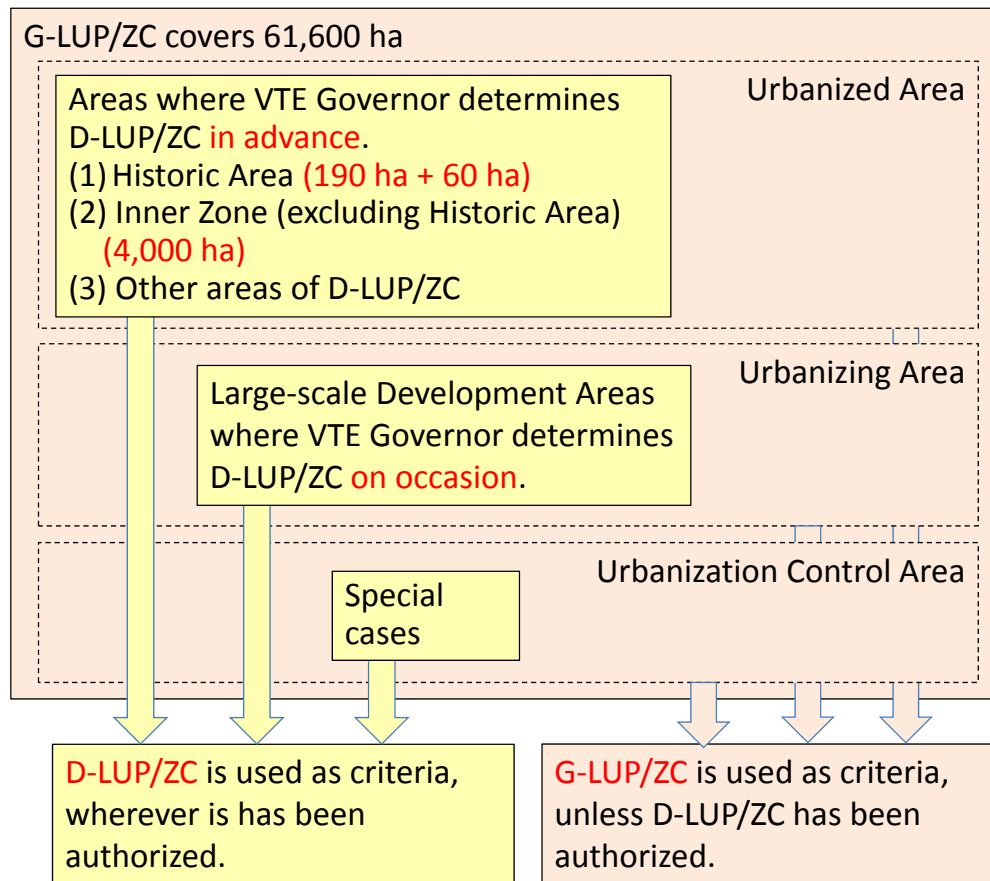
- Ministerial Order on City Planning Regulation (2006) -



Wherever D-LUP/ZC has been authorized, D-LUP/ZC will be the regulation that the people must comply with, instead of G-LUP/ZC.

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G-LUP ZC
and
D-LUP/ZC



<Reference> Extract from CPL (City Planning Law 1999)

Article 2: City plans consist of graphical drawings, feasibility reports and regulations relating to the management of cities.

Article 5: Domestic and foreign individuals and organizations residing in the Lao PDR shall have the obligation to strictly comply with city plans.

Article 27: Issuance of permission for construction or major repair is the issuance for activities that are requested in connection with construction or major repair that are consistent with regulations on city plans, such as:

- Building construction;
- Building repair (modifying buildings, full or partial demolition of buildings);
- Digging or filling of land;
- Installation of electricity poles, telephone poles, pylons, water towers, and fly-over bridges, and others in accordance with regulations on city plans.

Article 49. Compensation Measures: Individuals or organizations that violate the provisions of this law causing damage or loss to the property of the State, collectives, or individuals shall pay compensation in accordance with the laws and regulations.

Article 50. Fines: Individuals or organizations violating the provisions of this law shall be fined as follows: fine in an amount equal to 10% of the value of constructed or repaired buildings that are unauthorised. In the event that the construction does not comply with the city plan, the violator shall also demolish the unauthorised construction, depending on the case.

Article 51. Penal Measures: Any individual, including the people and civil servants, who violates this law by committing an offence (*), such as using forged documents, forging documents, abuse of power for his own benefit, and negligence in the performance of duties, and thereby causes damage to the life or health of any individual, or to any property of the State and collectives, or who does not comply with safety measures in operations thereby causing loss of life or injury, shall be punished in accordance with the Penal Law.

(*)The term "offence" is used here, as in the Penal Law, to refer generally to criminal acts. There are three levels of such criminal acts as set out in Article 8 of the 2005 Amended Penal Law and Article 7 of the 1989 Penal (translations of both these laws are available in this series).

Article 52. Additional Measures: In addition to the measures defined in Articles 48, 49, 50 and 51 above, violators that cause severe damage to the property of the State, collectives, and individuals shall be punished with additional measures, such as: suspension of business, withdrawal of license, and demolition of the unauthorised construction and repair, depending on the case.

Attachment 2

Draft Ministerial Order on Construction Management
Regulation (Essential Part) and Its Guideline

Draft

Ministerial Order on
Construction Management Regulation
(Essential Part)

and
Its Guideline

Project for Urban Development Management
Vientiane Capital, Lao PDR

1

- (1) The Minister of Public Works and Transport has approved “**Construction Management Regulation (kot la-biap)**”, and issued it through the Minister’s Decision, number XXXX, on XX September 2016.
- (2) The Directorate General of DHUP of MPWT has approved “**Guideline (bot-nenam) of Construction Management Regulation**”, and issued it through the DG’s Decision, number XXXX, on XX September 2016.
- (3) This document consists of:
 - (a) “Construction Management Regulation”, which is shown in a box of black line, and
 - (b) “Guideline of Construction Management Regulation”.

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Table of Contents

Article 1: Purpose and Status

Article 2: Target Objects

Article 3: Requirements

Article 4: Obligation to comply with LUP/ZC

Article 5: Obligation of construction procedure

Article 6: Countermeasures against violations

Article 7: Construction Management Committee and Special Treatment

Article 8: Enforcement

3

Article 1 Purpose and Status

This documents of “Construction Management Regulation” provides common statements for the administration regarding Construction Activity, based on Construction Law and City Planning Law.

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Article 2 Target Objects

Target objects are:

- (1) Public Infrastructure,
- (2) Land,
- (3) Buildings, and
- (4) Structures.

<Exceptions>

- (Exception 1) Objects of National heritage
- (Exception 2) Objects of National defense facilities
- (Exception 3) Objects, which were constructed or installed before the enforcement of the requirement

<Special treatment of Exception 3 >

- (1) Notwithstanding Exception 3 above, the requirement is applied to the objects below.
 - (a) Objects coming under condition below:
 - They had been illegal before the enforcement, and do not meet the requirement.
 - (b) Objects coming under one of any conditions below:
 - They have extended part, or
 - They are renovated after the enforcement of the requirement, of which construction cost is more than one third of that of assumed whole construction.
- (2) One year after the enforcement of the regulation, notwithstanding Exception 3 above, all advertisement and sign including those, which have been existing before the enforcement of the regulation, become subject for the new requirement.

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Target objects in detail

“Building” means a kind of “Structure (sin koo saang, or sin pok saang)”, has a roof, and includes equipment installed to the building.

“Structure” includes advertisement and signs.

Detail of four Target objects mentioned in Article 2 is as below.

- (1) “Public Infrastructure” includes:
 - Road,
 - Park,
 - River,
 - Pond,
 - Water supply,
 - Wasted water drainage and Rain water drainage,
 - Electricity line and Telephone line, and
 - Trash clean-up system
- (2) “Land” is considered as Target objects from the viewpoint of:
 - Site of buildings and structures,
 - Land use with no buildings and structures.
- (3) “Buildings” include equipment installed to the building, such as:
 - Water tank,
 - Antena, and
 - Cooling tower.

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(4) "Structures" include:

- Chimneys,
- Towers,
- Retaining walls,
- Elevatory systems,
- Storage facilities,
- Advertisement and shop sign, which can be seen from the outside, and
- Objects on the reservation area and the road area.

The target object of this regulation includes "Land". "Land" includes not only the building site but also the land where no structure stand, because stock of hazardous materials on the land is also controlled by this regulation, for example.

Exceptions of Target objects

Article 2 mentions "exceptions of target objects" as below.

(Exception 1) Objects of National heritage

(Exception 2) Objects of National defense facilities

(Exception 3) Objects, which were constructed or installed before the enforcement of this regulation

"Exception 3" has a remark as shown below.

Special Treatment of Exception 3 (Treatment for existing structures)

(1) Building and structures, other than advertisement and sign

Case	Application
Building construction on the site where any buildings have existed since before enforcement.	Building constructed before enforcement → Renovated structure within the limitation mentioned in below. → Not to be applied.
	Renovated structure after the enforcement, of which construction cost is more than one third of assumed whole construction → To be applied.
	Building constructed after enforcement, including: - Reconstructed part, - Expanded part, and - Renovated part of external feature, such as painting. →
Building construction on the new site. →	

(2) Advertisement and sign

Case	Application
Being installed before enforcement →	Until one year after the enforcement → Not to be applied.
	After one year passed from the enforcement → To be applied.
Being installed after enforcement →	

- (A) Target of regulation,
- (B) Target of permission, and
- (C) Subject of countermeasures against violation

(A) Target of regulation

As Article 2 says, all objects related to City Plan are target of regulation regardless their scale, which include (1) Public infrastructure, (2) Land, (3) Buildings, and (4) structures. For example, one piece of block of a building is also involved in “the target of regulation”.

(B) Target of permission

As Article 6 says, some construction activities are target of permission. It means, for example, painting the external wall is subject for (A), while it is not subject for (B).



(C) Subject of countermeasures against violation

As Article 7 says, Items (A) may be subjects for countermeasures against violations, such as order to demolish. It is the point that the subject for countermeasures is not limited within the target of permission.

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Article 3 Requirements

Requirements are provided in:

- G-LUP/ZC or D-LUP/ZC, and
- Land-development standard, and
- Specific requirements, which are attached with the permission for the specific project.

<Remark>

1. LUP/ZC consists of G-LUP/ZC and D-LUP/ZC, and they are issued for specific areas by the Provincial Governor, based on the City Planning Law. **In the target area of D-LUP, requirements provided by G-LUP/ZC are not applied.** Requirements provided by D-LUP/ZC are applied to each project instead.
2. As Article XX says, **Construction Management Committee of the Lao Government** and **Construction Management Committee of Vientiane Capital** have a power to agree special treatment for the specific project in considering its special circumstances.

1. As a part of Land-development permission says, the developer will be requested to proposal specific regulation items, such as Land Use, H (Maximum building height) , E (Land use ratio), and COS (Land use coefficient), if:
 - (i) there are no such regulation items specified by G-LUP/ZC or D-LUP/ZC, or
 - (ii) the applicant would like to propose regulation items different from current values.
 And then, if the proposed specific regulation items are approved, they will be attached to the permission as specific requirements.
2. When the Building Code is issued, it will be added in the requirements.

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Article 4 Obligation to comply with Requirements

People have obligations below, based on:

- Article 5 of Construction Law, and
- Article 5 of City Planning Law.
 - (1) **Land owners** must keep their lands in compliance with the requirements provided in Article 4.
 - (2) **Building owners** must construct and keep target objects in compliance with the requirements provided in Article 4.
 - (3) **Designers** must design target objects in compliance with the requirements provided in Article 4.
 - (4) **Builders** (including supervisors on the site) must not proceed construction activities in any of following cases:
 - Case where construction permission is not issued yet in spite that they are subjects of construction permission, and
 - Case where they do not meet a part of conditions of construction permission.
 - (5) **Tenants and occupants** must make an effort to keep target objective in compliance with the requirements provided in Article 4.

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Article 5 Obligation of Construction Procedure

(Urban Planning Certificate)

1. When someone intends to implement Large Urban Projects as followings:
 - more than **5 ha** in the project area,
 - more than **30 m** in building height of the tallest one in the project area, or
 - more than **10,000 m²** in total floor area of buildings in the project area,he/she must get **Urban Planning Certificate** from **Governor of Vientiane Capital or Provincial Governor**, based on the Article 27 of CPL, prior to submitting application for Land-development Permission and Building Permission.
The Governor examines the application whether it harmonizes with City Plan or not. And, the Governor shall ask the Construction Management Committee of their opinion through DPWT if necessary.

<Exception>

Construction activity, which is implemented by the Government.

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(Land-development Permission)

2. When someone intends to implement “Land-Development” (construction activity involving construction of new roads), he/she must get Land-development Permission from DPWT or OPWT based on the Article 27 of CPL, prior to starting the land-development activity.

DPWT and OPWT examines the application whether it complies with the Land-development standard and LUP/ZC or not. And, DPWT shall ask the Construction Management Committee of their opinion if necessary.

<Exception>

Land-development activity, which is implemented by the Government.

(Application for Land-development Permission)

Persons who intend to obtain Land-development shall submit to the authority a written application in which the following matters are described:

- (a) Location, extent, and scale (m²) of the development area
- (b) Design of the infrastructure in the development area
- (c) Use of the buildings or structures scheduled to be built in the development area
- (d) Proposal of specific regulation items, such as Land Use, H (Maximum building height) , E (Land use ratio), and COS (Land use coefficient), if:
 - (i) there are no such regulation items specified by General LUP/ZC or Detail LUP/ZC, or
 - (ii) the applicant would like to propose specific regulation items different from current values.

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(Consent of Infrastructure Administrators)

Persons, who intend to apply for Land-development Permission, must consult with and obtain the consent of:

- (a) administrative organizations of public facilities relating to development activities.
- (b) administrative organizations who will administer infrastructure that will be constructed as a result of the development activities.

(Building Permission)

3. When someone intends to implement any of building construction activities as followings:

- Building construction
- Building repair
- Installation of electricity poles, telephone poles, pylons, water towers, fly-over bridges, and others.

he/she must get Building Permission from DPWT or OPWT based on the Article 27 of CPL, prior to starting the building construction activity.

DPWT and OPWT examines the application whether it complies with LUP/ZC or not. And, DPWT shall ask the Construction Management Committee of their opinion if necessary.

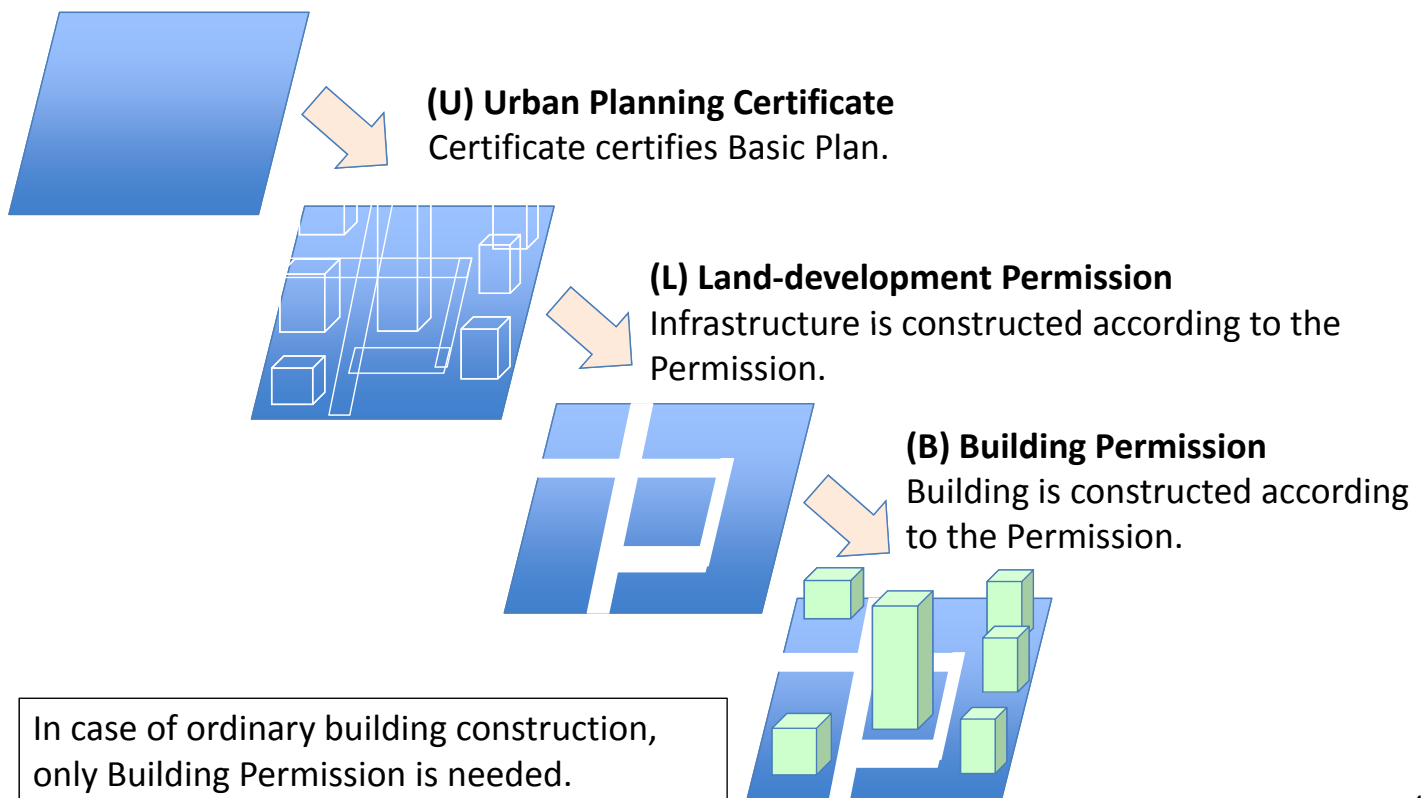
14

Certification and Permission

- (1) New system of “(U) Urban Planning Certificate” has been established.
- (2) “Construction Permission” has been divided into two steps of:
 - “(L) Land-development Permission” and
 - “(B) Building Permission”,because they are different in stages and applicants in many cases.
When the project does not involve new construction of road, only “Building Permission” is required.
- (3) Outline of three permission/certificate systems are shown in the tables and figures below.
In the table, VTE, DPWT, and OPWT mean:
 - Vientiane Capital,
 - DPWT of Vientiane Capital, and
 - OPWTs in Vientiane Capital.
- (4) “Land-development Standard”, which is used as criteria when the authority examines “(L) Land-development Permission”, has been established.

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In case of large scale development, three steps of permission are needed.



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Permission Items	(U) Urban Planning Certificate	Construction Permission	
		(L) Land-development Permission	(B) Building Permission
Target	Large Urban Projects as followings: - more than 5 ha in project area, - more than 30 m in building height of the tallest one, or - more than 10,000 m² in total floor area of buildings.	Project involving construction of new roads	Building construction and the like.
Applicant	Developer	Developer	Building owner
Area of application	Whole development area.	Whole development area or a part of the area. (*1)	Each building site. (*2)
Occasion to get permit	- After completion of basic plan, and - before starting detail design of infrastructure and buildings.	- After completion of detail design of infrastructure, and - Before starting construction work of infrastructure.	- After completion of detail design of a building, and - Before starting construction work of building.
Purpose	To examine whether basic plan of infrastructure and buildings complies with related standards and 15 items or not. It is helpful for developer to know the possibility of construction permission prior to starting detail design.	To examine whether each detail design of infrastructure , such as road, complies with related standards or not.	To examine whether each detail design of building complies with 15 items or not.

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Permission Items	(U) Urban Planning Certificate	Construction Permission	
		(L) Land-development Permission	(B) Building Permission
Drawings to be attached to the application	Basic plan of infrastructure and buildings including: - Allocation and capacity of infrastructure, and - Use and volume of expected buildings.	Detail design of infrastructure including: - Detail structure of section of road, - Detail design of drainage, - Etc.	Detail design of building (*3)
Criteria	Land-development Standard and 15 items *Compliance in detail is examined in the process of (L) and (B).	Land-development Standard	15 items *Building Code will be checked in future.
Person to issue	Governor of Vientiane Capital or Provincial Governor	DG of DPWT or District Governor	DG of DPWT or District Governor

(*1) It is acceptable to apply for a part of (U), one after another, depending on the proceeding of development.

(*2) Application must be done for each building site.

(*3)

1) Application for construction permission attaching contact detail.

2) Copy of census or address certificate.

3) Copy of land ownership certificate.

4) Location plan and drawing or photo of the building.

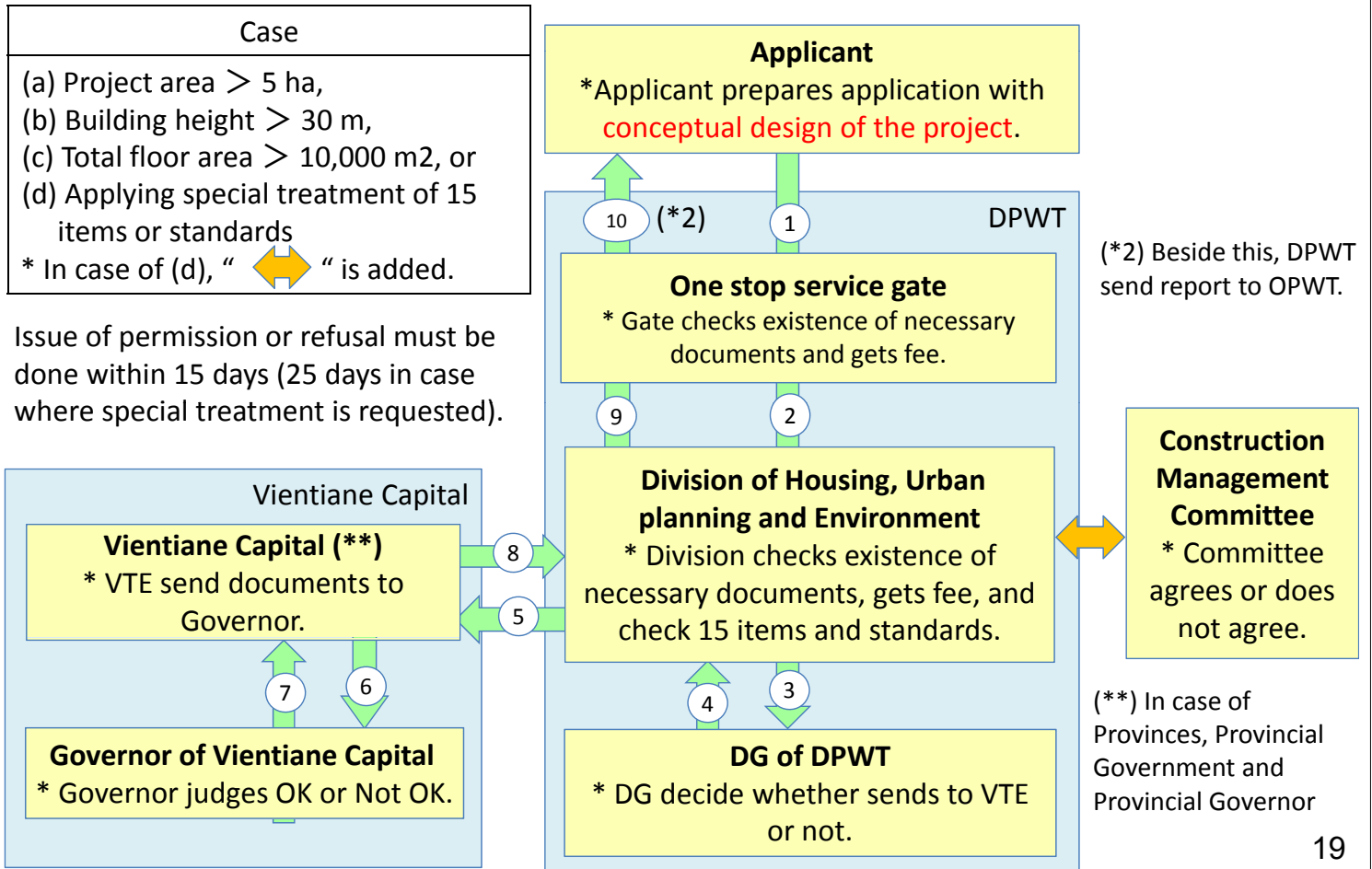
5) General plan on land boundary, construction line and road line, distance from each side of the building to each line above, gateway with its width and length, drainage water plan, digging/filling land, tree planting, and so on.

6) Architectural and technical plan of construction.

7) Environmental protection measure or environmental impact evaluation.

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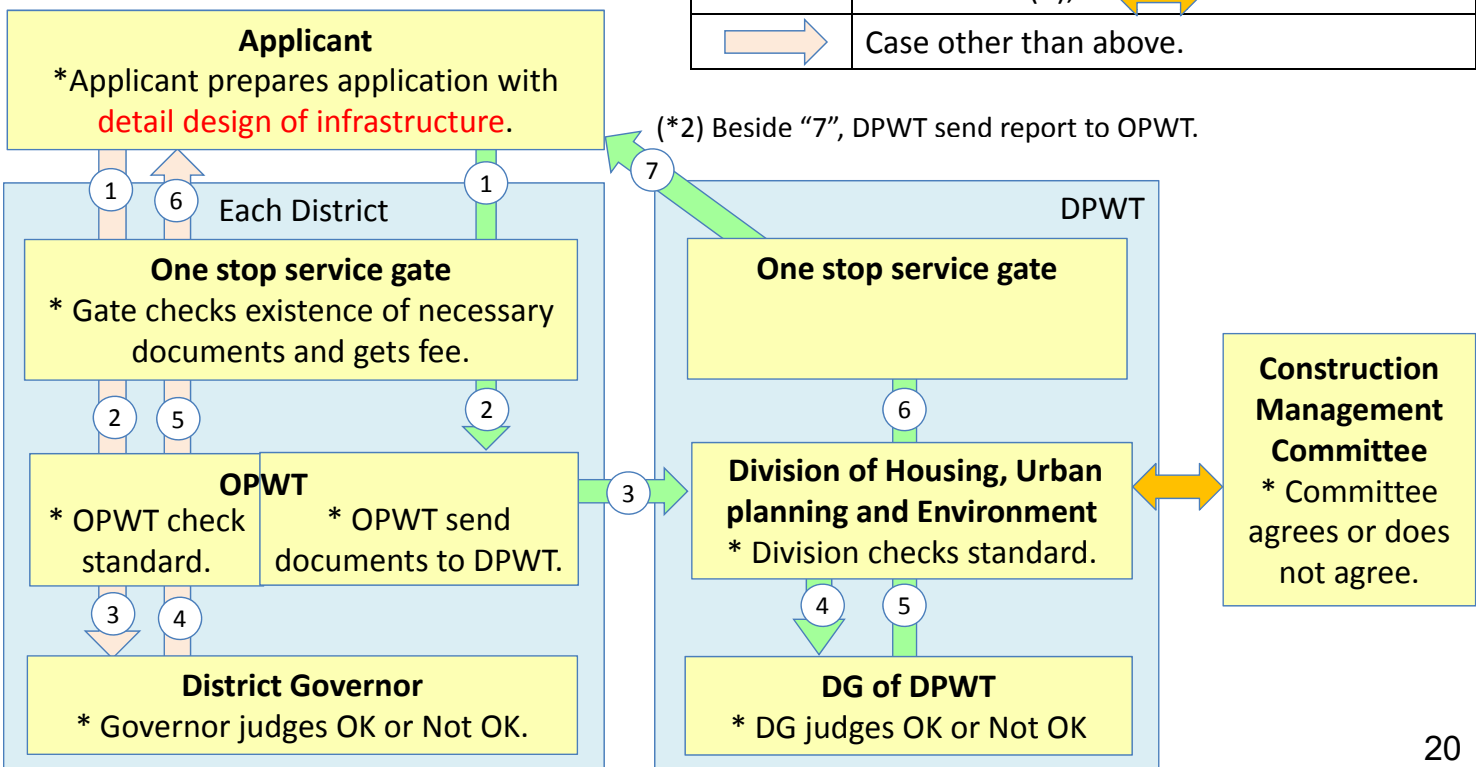
Procedure of **Urban Planning Certificate**



Procedure of **Land-development Permission**

Issue of permission or refusal must be done within 15 days (25 days in case where special treatment is requested).

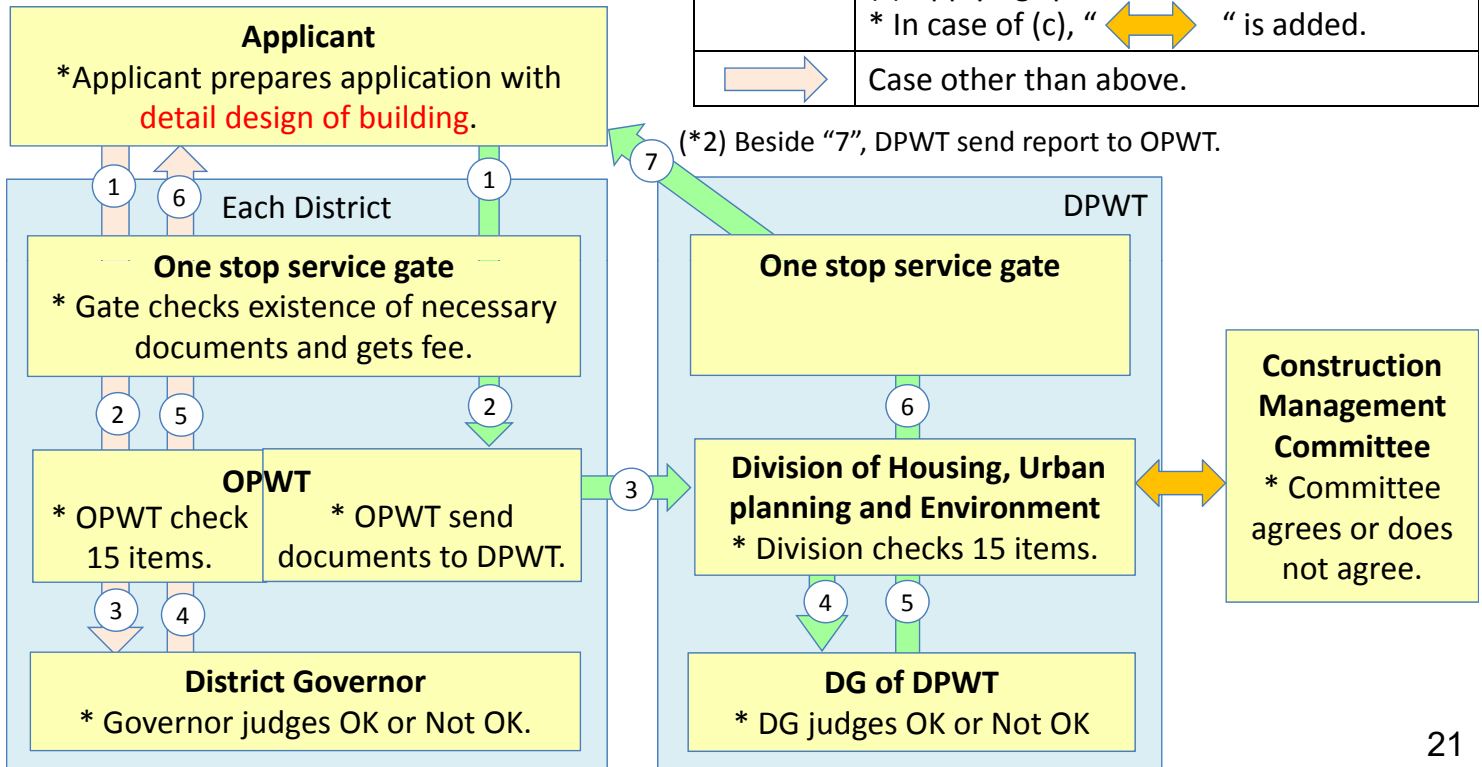
Legend	Case
	(a) Total floor area > 1,000 m ² , (b) Applying special treatment of 15 items * In case of (b), “↔” is added.
	Case other than above.



Procedure of Building Permission

Issue of permission or refusal must be done within 15 days (25 days in case where special treatment is requested).

Legend	Case
	(a) Total floor area > 400 m ² , (b) Special use specified in the list, or (c) Applying special treatment of 15 items * In case of (c), "" is added.
	Case other than above.



Flow of Large-scale Development in Vientiane Capital

<Exception> Construction activity, which is implemented by the Government.

When someone intends to implement Large Urban Projects as followings:

- more than 5 ha in the project area,
- more than 30 m in building height of the tallest one in the project area, or
- more than 10,000 m² in total floor area of buildings in the project area,

(U) Urban Planning Certificate

When someone intends to implement "Land-Development" (construction activity involving construction of new roads),

(L) Land-development Permission

- (a) Developer constructs new infrastructure, such as road, in the development area, according to the plan that was attached in the permission.
- (b) Ownership of constructed infrastructure is transferred to the Vientiane Government. And Ownership of building sites is transferred to each building owner.

When someone intends to implement any of building construction activities as followings:

- Building construction
- Building repair
- Installation of electricity poles, telephone poles, pylons, water towers, fly-over bridges, and others,

(B) Building Permission

- (c) Each building owner construct a building.
(Sometimes, the developer itself constructs a building.)

- (1) This procedure of (U) (L) and (B) will be required for every project:
 - (a) excluding projects, which are implemented by the Government itself.
 - (b) including projects, which are implemented in SEZ or Concession Project.
- (2) In the process of (L), Plan of infrastructure is examined whether it conforms to Land-development Standard, or not.
- (3) In Concession Project, Concession Right (right to use land for 50 to 100 years), which was given to the developer, will be is divided into pieces for each building site, and will be transferred to each building owner.
- (4) We can not expect the developer to maintain infrastructure in the development area for the whole Concession term (50 to 100 years), because all right to use building sites will be transferred from the developer to others. Therefore, it is necessary for Vientiane Capital to receive ownership of infrastructure from the developer.

Land-Development Standard

(The use of scheduled buildings etc.)

1. The use of scheduled buildings etc. shall conform to the restriction on such use set forth in:
 - (a) G-LUP/ZC,
 - (b) D-LUP/ZC, or
 - (c) Proposal, which is described in the application.

(Roads, parks, open spaces and other vacant spaces for public use)

2. Roads, parks, open spaces and other vacant spaces for public use shall be of scale and structure, and be properly located, so that they will cause no inconvenience from the viewpoints of environmental preservation, disaster prevention, traffic safety and the efficiency of business activities considering the following items.
 - (a) Scale and shape of the development area and the conditions of its surroundings;
 - (b) Topography of land in the development area and nature of the ground;
 - (c) Uses of scheduled buildings, etc;
 - (d) Scale and layout of the sites of scheduled building, etc.
 - (e) Proposal of regulation items, such as Land Use, H (Maximum building height) , E (Land use ratio), and COS (Land use coefficient), if it is attached to the application form.

(Sewers and other drainage facilities)

3. Sewers and other drainage facilities shall be designed considering the following matters with structure, capacity and appropriate layout, and will not cause any damage in the development areas and surrounding areas by inundation etc.

- (a) Precipitation in the relevant area;
- (b) Matters listed in sub-items (a) through (e) of the previous paragraph and conditions in the discharge destination.

Wastewater including:

- black water (wastewater from toilet) and
- grey water (wastewater from kitchen, shower, washing machine, etc.

must be discharged according to the table below.

Location of the development area	Building	Buildings other than the right	Residential building with total floor area less than 300 m2, in the development area with 5 ha or less
in the service area of public sewerage system		To the public sewerage system.	
out of the service area of public sewerage system		To the drainage after treatment less than 60 mg/liter in effluent BOD (Biochemical Oxygen Demand).	the septic tank in accordance with "Standard of Septic Tank for Household" shall be regarded as a method of treatment in the left.

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(Water supply facilities)

4. Water supply facilities shall be designed considering the matters listed below with structure, capacity and appropriate layout that will not hinder anticipated demand in the relevant development areas.

- (a) Scale and shape of the development area and the conditions of its surroundings;
- (b) Topography of land in the development area and nature of the ground;
- (c) Uses of scheduled buildings, etc;
- (d) Scale and layout of the sites of scheduled building, etc.

(Schools and other facilities)

5. Schools and other facilities for the public interest and of scheduled buildings, etc. in the development areas shall be distributed in a manner that improve convenience in the development areas and the preservation of environment in the development areas and surrounding areas, considering the purpose of the relevant development activities.

(Ground improvement, etc.)

6. Design shall be established so that ground improvement, construction of retaining walls or drainage facilities or other necessary measures for securing safety are taken with regard to the purpose of preventing disasters caused by ground sinkage, landslides or flooding or others.

<Remark>

In the process of Land-development Permission, it is not required for the developer to obtain agreement from all landowners involved in the project. But it is needed before implementation of the project.

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Article 6 Countermeasures against violations

Vientiane Capital, Provincial Government, and DPWT has a power below.

- (1) Building officials may **request a report** on the target objects provided in the Article 2, from:
- land owner,
 - owner of the building or objects,
 - custodian or occupant,
 - designer, or
 - supervisor or construction executor.
- (2) In limits necessary for building officials in order to perform execution of this regulation, he/she may:
- **enter** the building concerned, its site or construction field and **inspect or examine** the building, its site, building equipment, building materials, drawings/specifications, and other articles related to construction work on the building, or
 - **question**:
 - land owner,
 - owner of the building or objects,
 - custodian or occupant,
 - designer, or
 - supervisor or construction executor.

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- (3) With respect to the target objects provided in the Article 2 in violation of the requirements provided in Article 4, the Governor (represented by DPWT):
- may issue **orders**:
 - for:
 - the suspension of the construction work concerned,
 - the demolition, relocation, rebuilding, addition, repair, remodeling, prohibition or restriction of use of the building concerned, or
 - the implementation of other measures to correct violations against the regulation,
 - to:
 - land owner,
 - owner of the building or objects,
 - custodian or occupant,
 - designer, or
 - supervisor or construction executor.
 - providing a reasonable grace period, and
 - may **request related suppliers to stop** their supply of electricity, water, gas, or telephone.

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(4) In cases where the target objects provided in the Article 2 in violation of the requirements provided in Article 4 are located **in the reservation area or road area**, the Governor (represented by DPWT) may remove the objects from the reservation area or road area. In this case, the Governor (represented by DPWT) shall notice to:

- land owner,
- owner of the building or objects, or
- custodian or occupant,

as long as possible.

(5) In cases where the Governor (represented by DPWT) has issued an order for the necessary measures under paragraph 3, and if:

- the person ordered to take the measures does not perform the measures,
- the performance is insufficient, or
- the performance cannot be expected to be completed

within a period as mentioned in the said paragraph,

it may proceed

- to **execute, by itself**, the measures which should have been taken by the person under obligation or
- to cause a third party to take such measures,

under the agreement of the Construction Management Committee, at the expense of such person.

Countermeasures against Violations

In Article 4 and 6 provide:

- (1) Obligations of related people, and
- (2) Power of authorities (DPWT) against violations.

Obligations		
Land owners	must keep the land	In compliance with the requirements provided in Article 4.
Building owners	must keep the building	
Designers	must design the building	
Builders	must construct the building	
Tenants and occupants	must use the building	





Powers		
DPWT has a power	(1) To request a report, (2) To enter the building, and inspect or examine, and to question (3-1) To order: - suspension of the construction work, - restriction of use of the building, - demolition of the building, etc. providing a reasonable grace period. (3-2) To request related suppliers to stop their supply of electricity, water, gas, or telephone, (4) To remove the illegal objects from the reservation area and road area,	to the rerated people above, if the building is likely violating the requirements provided in Article 4.
	(5) To execute what DPWT ordered, by DPWT it self, in cases where orders are not implemented within the grace period.	

Legal Penelty

Provisions stating penalty, such as fine and prison, will be provided in the Law, like below.

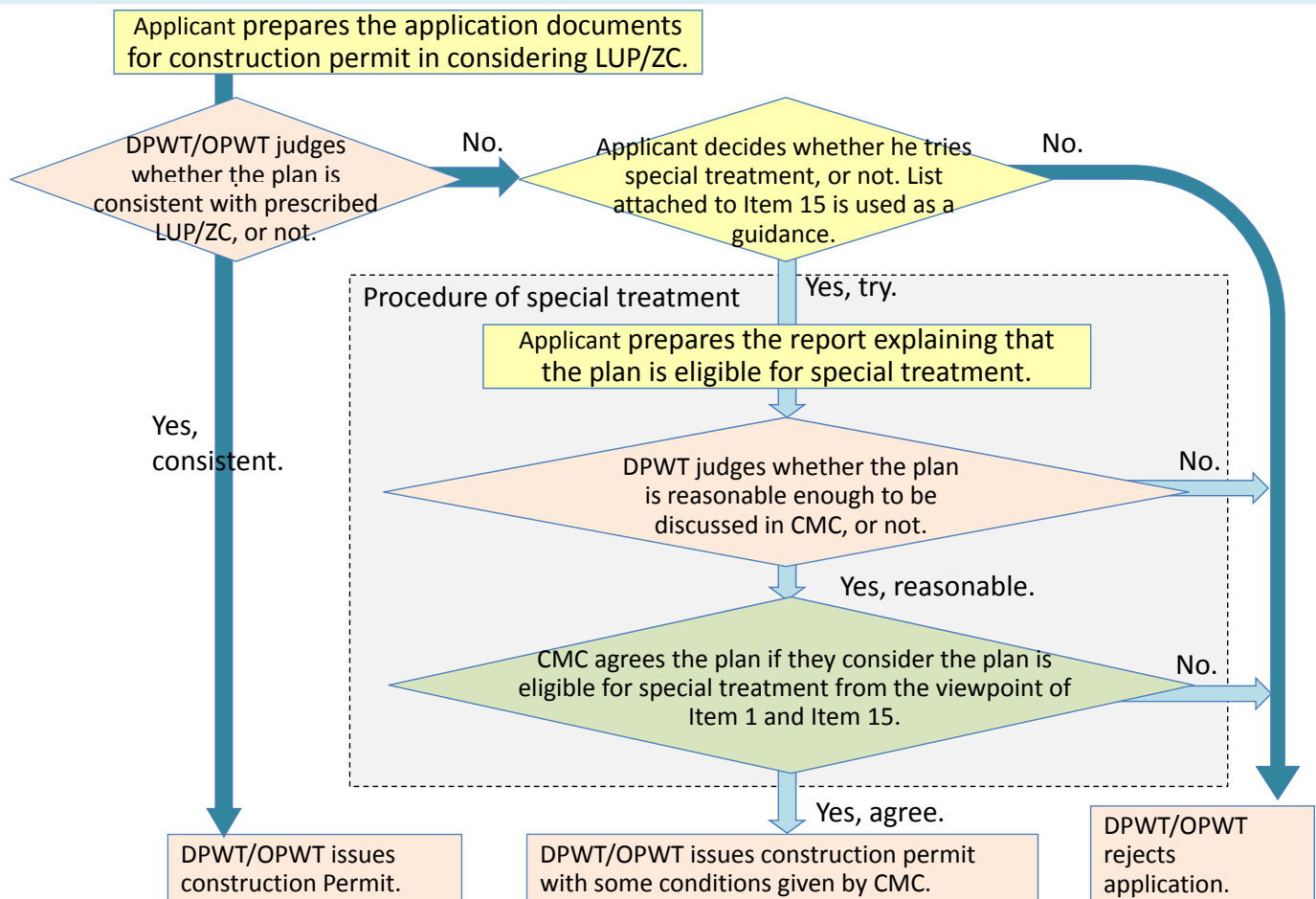
Persons shown in the table below are subject for fine or prison through the process of accusation.

Persons	Fine or/and jail	
	Fine (less than)	prison (less than)
Regarding (1) of previous Article, the person who did not reply the request of a report from the building official.	XX KIP	XX years
Regarding (2) of previous Article, the person who prevented a building official to enter and/or inspect buildings, etc.		
Regarding (2) of previous Article, the person who did not reply the question from the building official.		
Regarding (3) of previous Article, the person who did not obey the order of the Governor (represented by DPWT)		
Regarding (4) and (5) of previous Article, the person who prevented or obstructed execution.		

Article 7 Construction Management Committee and Special Treatment

- (1) The Government establishes:
- Central Construction Management Committee (C-CMC), and
 - Provincial Construction Management Committee (P-CMC).
- (2) **DPWT or District Governor** may issue “Land-development Permission” and “Building Permission” with special treatment through the procedure below. In this case, the plan of application may not meet a part of the prescribed requirements of LUP/ZC.
- (Process 1) The building owner submits an application to DPWT with attached documents explaining that the construction activity is a special case, and is reasonable for a special treatment.
- (Process 2) DPWT judges whether the plan is reasonable enough to be discussed in P-CMC or not.
- (Process 3) P-CMC examines the application on a case-by-case basis. General features stated in Item 1 and descriptions of Item 15 of each ZC shall be reference in the discussion. Then, P-CMC decides whether the plan is reasonable for a special treatment or not, and sends the result of discussion to DPWT.
- (Process 4) DPWT or District Governor may issue “Land-development Permission” and “Building Permission” with special treatment, according to the decision of P-CMC.
- (3) Notwithstanding paragraph (2), in case of the projects in SEZ, C-CMC examines the application instead of P-CMC.

Special Treatment in Permission Process



Application to Projects in SEZ and Special Projects in Vientiane Capital

<Situation>

- (a) **G-LUP/ZC** covers **61,600 ha** and be effective for 61,600 ha.
- (b) **D-LUP/ZC** are issued **for some areas** in 61,600 ha.
- (c) There are some **SEZ** (Special Economic Zone or Specific Economic Zone) in 61,600 ha.
- (d) There area some **SP (Special Projects)** other than SEZ in 61,600 ha.

<Administration>

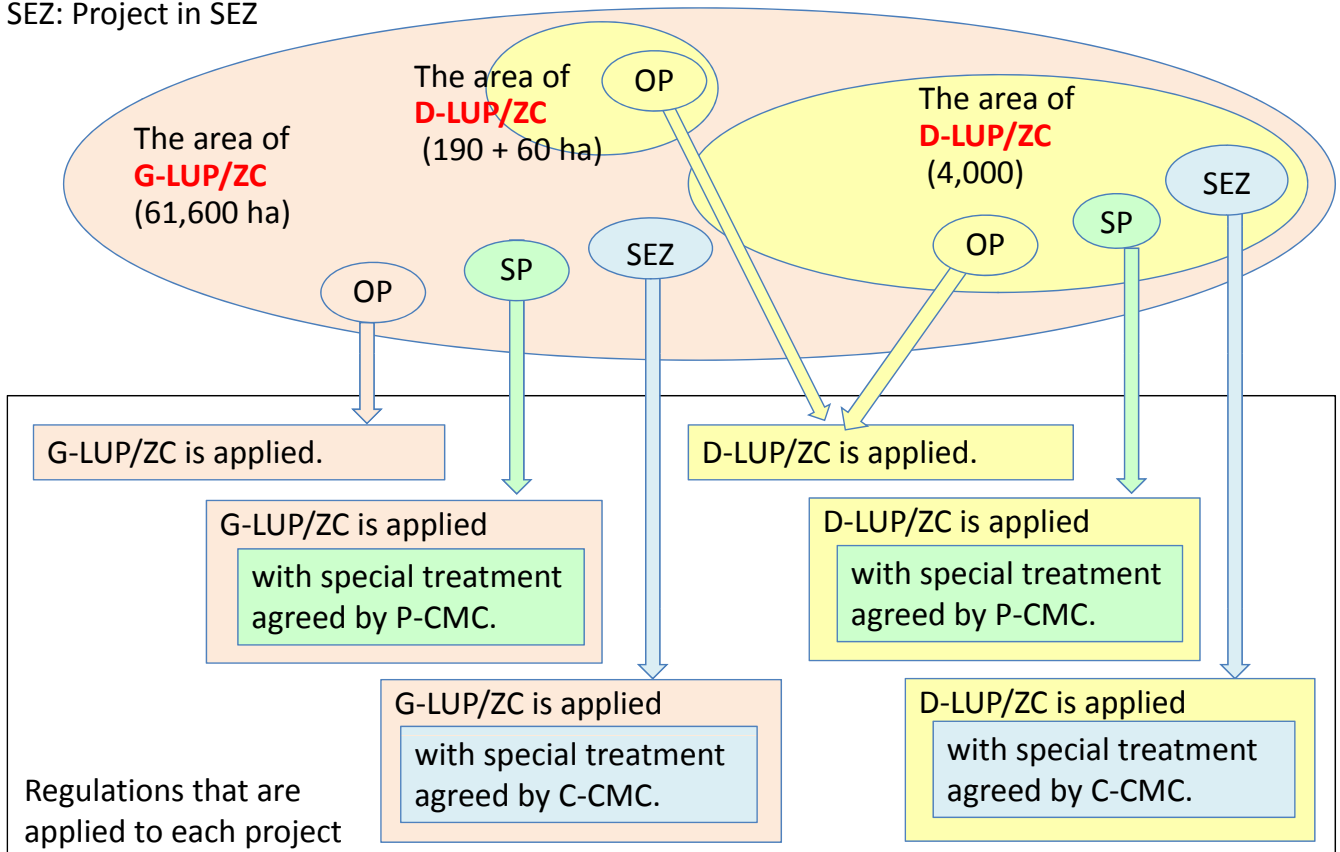
- (1) **Regulations** that are applied to each project are as shown in the figure of the next page.
- (2) (i) **C-CMC** will approve special treatment for **some projects in SEZ** and **some SP**, of which plan does not meet some prescribed regulations provided in LUP/ZC.
- (ii) **P-CMC** will approve special treatment for **some SP other than (i)**, of which plan does not meet some prescribed regulations provided in LUP/ZC.
- (3) **Even in SEZ**, it is required for developers and building owners to get **construction permit from DG of DPWT**.
- (4) **Countermeasures against violations** are handled by DG of DPWT and District Governor.

Application to Projects in SEZ and Special Projects

OP: Ordinary Project

SP: Special Project (such as some concession project)

SEZ: Project in SEZ



Article 8 Enforcement

(Date of enforcement)

(Application to existing building and structure)