

RECOGNITION OF NEEDS AND CREATION OF PROFESSIONAL TRAINING IN THE AREA OF PREPARATION AND MANAGEMENT OF INFRASTRUCTURE CONSTRUCTION PROJECTS FINANCED BY THE EUROPEAN UNION

No: PL/04/B/P/PP/174 417

REPORT Work Package III

> November 2005 (Draft Version)

1. INTRODUCTION

This report aims at disseminating the results of Work Package III (WPIII) of the Leonardo da Vinci project entitled: "Recognition of needs and creation of professional training in the area of preparation and management of infrastructure construction projects financed by the European Union", n° PL/04/B/P/PP/-174 417, by the following project partners involved:

- WUT Warsaw University of Technology (Poland)
- PBCP Polish British Construction Partnership (Poland)
- SIDIR Polish Association of Consulting Engineers and Experts (Poland)
- UMINHO University of Minho (Portugal)
- VGTU Vilnius Gediminas Technical University (Lithuania)
- PUV Polytechnic University of Valencia (Spain)

The purpose of WP III is to describe the procedures in construction management in Poland, Portugal, Lithuania and Spain; this way, a common understanding of managerial and legal procedures in partners countries (Poland, Portugal, Lithuania and Spain) could be reached, facilitating operations of construction companies at the foreign markets. These results, among other work package results, will aid in the development of a series of future CPD (Continuing Professional Development) courses in management of infrastructure projects, as well as the creation of an internet platform.

The intent is to push forward another tool that may assist engineers and managers in solving common problems. Subsequently, know-how can be improved, enhancing the project's performance and in turn diminishing reasons for claims and disputes that frequently arise in the construction industry due to lack of quality, cost overruns, delays, etc.

2. RESULTS

A double entrance table (or matrix) was developed in our previous meeting (Vilnius, July 2005). In rows, managerial procedures used in construction industry were summarised. In columns, the main stakeholders that take part in the infrastructure life cycle were displayed: promoter, consultant and contractor.

It was considered the infrastructure life cycle as a whole, with the five major phases commonly used: conceptual, design, pre-construction (or tendering), construction and handing over. The operational phase, though being a very important phase of the infrastructure life cycle, was not considered due to its many possibilities (for each country and for each type of

infrastructure). Each phase was divided in stages, and each stage in steps, thus the managerial procedures were detailed enough.

These steps, stages and phases are based on the experience of the partners; the infrastructure construction projects financed by the European Union are managed through public agencies. More common procedures (based on the PMBoK published by the Project Management Institute) were not considered because we think that they are better fit for private promoters. Besides, many project management books are very often biased to other industries that are not construction.

For infrastructure projects, the sequence Plan-Bid-Design-Bid-Build is used most of the time:

- a) The Public Agency plans the project.
- b) The Public Agency bids a contract for design: a Consulting Engineering & Architectural Company is chosen for the job.
- c) This Consulting Engineering & Architectural Company designs the project with the supervision of the Public Agency.
- d) The Public Agency bids a contract for construction: a Construction Company is chosen for the job.
- e) The Public Agency bids a contract for direction (or inspection) of the construction works: a Consulting Engineering & Architectural Company is chosen for the job. This company is not generally the same as in (b) and (c).
- f) The Construction Company builds the infrastructure with the supervision of the Consulting Engineering & Architectural Company.
- g) The Public Agency takes over.
- h) The Public Agency operates and maintains the built infrastructure.

Regarding the main participants or stakeholders, the names in capital letters are the ones proposed. The others are alternative names that could fit better in some countries or in some circumstances. Finally, the names in black letters are the organizations involved):

- CLIENT (Promoter Owner Developer Employer; Public Agency).
- CONSULTANT (Engineer Designer Director, Inspector or Supervisor of Works Project Manager; Consulting Engineering & Architectural Company).
- CONTRACTOR (Construction Company)

The consultant is the design team in the design phase, and the director, inspector or supervisor of woks in the construction phase. Many times they would be different persons and even different consulting engineering companies because of the sequence of procurement (PlanBid-Design-Bid-Build), and because it is almost impossible for a public agency to hire legally a project manager for all the process.

Finally, the most important legal regulations connected with preparation and management of international infrastructure projects, for each country and for the European Union globally, were considered. The legal regulations that affect each stakeholder for each one of the steps, were input in its corresponding cell of the matrix.

The normative considered was divided in five groups; for each norm, an acronym was selected. The groups are the following:

- a) Procedures for tendering and contracting (in **BLUE**).
- b) Procedures for safety and health in construction (in RED).
- c) Procedures for environmental impact assessment (in GREEN).
- d) Procedures for civil engineering and building infrastructures (in BLACK).
- e) Procedures of the **European Union** were used as general reference in tendering and contracting, and safety and health (in ORANGE):
 - EU018: Directive on the coordination of procedures for the award of public works contracts, public supply contracts and public service contracts (2004/18/EC).
 - EU391: Directive on the introduction of measures to encourage improvements in the safety and health of workers at work (1989/391 CEE).
 - EU383: Directive supplementing the measures to encourage improvements in the safety and health at work of workers with a fixed duration employment relationship or a temporary employment relationship (1991/383 CEE).
 - EU057: Directive on the implementation of minimum safety and health requirements at temporary or mobile construction sites (1992/57 CEE).
 - EU085: Directive on the introduction of measures to encourage improvements in the safety and health at work of pregnant workers and workers who have recently given birth or are breastfeeding (1992/85 CEE).
 - EU033: Directive on the protection of young people at work (1994/33 CEE).

For each country, a double entrance table was filled in, according to the previous considerations. The four of them are displayed in the annexes. Right now only the spanish table has included the European Union Procedures in it.

Valencia, 14th of November, 2005

Eugenio Pellicer

ANNEX 1: POLISH PROCEDURES

lain Acts of Polish Parliament concerning investment process in construction:
APUORP - Act on the Acquisition by Perpetual Usufructuaries of the Ownership of Real
Property (of 26.07.2001);
APAFL - Act on the Protection of Agricultural and Forest Lands (of 3.02.1995);
LMR - Act on Land and Mortgage Registers and on Mortgage (of 6.07.1982);
VPN - Act on the Protection of Nature;
APHM - Act on Preservation of Historic Monuments (of 23.07.2003);
ARPM - Act on Real Property Management (of 21.08.1997);
SPD - Act on Spatial Planning and Development (of 27.03.2003);
W - Act on Waste (of 27.04.2001);
3L - Act - Building Law (of 7.07.1994) (changed 25.09.2005)
PL - Environment Protection Law (of 27.04.2001);
GCL - Act - Geodesic and Cartographic Law (of 17.05.1989);
GMW - Geotechnical and Mining Law (of 04.02.1994);
SA - Investment Support Act (of 20.03.2001);
/A - Motorway Act (of 27.10.1994);
DHHBW - Ordinance on healthy and higiene during building works
DQMBIE - Ordinance on qualifing methods and basics in investor's estimation
PG - Payments Guarantee (of 09.07.2003);
201 - Public Order Law (of 29.01.2004):

DENOMINATION USED IN THESE PROCEDURES	CLIENT	CONTRACTOR	ENGINEER / DESIGNER / CONSULTANT
OTHER DENOMINATIONS	PROMOTER - OWNER - DEVELOPER - EMPLOYER		DIRECTOR (INSPECTOR OR SUPERVISOR) OF WOKS - CONSULTANT - PROJECT MANAGER
ORGANIZATION	PUBLIC AGENCY	CONSTRUCTION COMPANY	CONSULTING ENGINEER COMPANY
CODIFICATION	Р	С	E
	BL, Chap. 1, art. 4 - general provisions; Chap. 2, art. 17, 18, 19, 27 - independent technical functions in construction;	and duties of architects, engineers and urban planners, of 15.12.2000,	Act on engineering licenses and professional bodies - regulates rights and duties of architects, engineers and urban planners, of 15.12.2000, BL, Chap. 1, art. 4 - general provisions; Chap. 2, art. 17, 18, 19, 27 - independent technical functions in construction;
CONTRACT	Contractual relationship between Partners in the project	Contractual relationship between Partners in the project	Contractual relationship between Partners in the project

1		CONCEPTUAL PHASE	ASPD, Chap. 1, art. 6 - general provisions; local spatial development plans; Chap. 3 - spatial planning in a province; GCL, Chap. 2 - land and property rights; Chap. 3 - concessions APHM, Chap. 3, Art 25-37 - proceedings related to works involving historic buildings and monuments	
1		Initiation of the project	POL, art. 99-117 - contests (spatial planning, urban planning, architecture);	POL, art. 99-117 - contests (spatial planning, urban planning, architecture);
	1	Analysis of needs	MA, art. 21-25 - location; art. 26-37 - land acquire, RCA, art. 24-33 - investment realization;	RCA, art.2-11 - roads location, 12-23 - land acquire 24-33 - investment realization:
			RCA, art. 2-11 - roads location; art. 12-23 - land acquire 24-33 - investment realization	
	2	Constraints identification	MA, art. 38-39 - National Roads Fund, APHM, Chap. 3, Art 25-37 - proceedings related to works involving historic buildings and monuments	RCA, attachments 1 and 2 - environmental reports; APHM, Chap. 3, Art. 25-37 - proceedings related to works involving
			RCA, attachments 1 and 2 - environmental reports;	historic buildings and monuments
			Resolution on the Protected Zone "Natura 2000".	
			APN, art. 6 - forms of the protection of nature; art. 10 - limits of a national park; art. 15 - restrictions on activities in national parks; art. 17	
			- bans on activities in landscape parks; art. 23 - designation of a	
			protected landscape zone; art. 24 - bans on activities in proteced	
			landscape zones; art. 28 - desingation of the Zone "Natura 2000"; art.	
			33 - bans on activities in the Zone "Natura 2000"; art. 83 - removal of	
			trees and bushes; arts. 84, 85 - fees for the removal of trees and bushes:	
			APHM, Chap. 3, Art. 25-37 - proceedings related to works involving	
			historic buildings and monuments	
	3	Conception of the project	EPL, art. 40 - proceedings concerning the impact on the environment	
			of the consequences of the country's spatial development plans and	
			regional developement strategies; art. 46 - proceedings concerning the legende at the opticement of plenored investments et 40, 50, 51, 50, 50, 50, 50, 50, 50, 50, 50, 50, 50	
			impact on the environment of planned investments; art. 49, 50, 51, 52, 54, 55, 56, 57, 58, 60 - scope of the report on the environmental	
			impact of an investment; art. 71, 72, 73, 74, 75, 76 - environment	
			protection in spatial development and during the execution of	
			investments; art. 272, 273, 274, 275, 276, 277, 278, 279, 280, 281,	
			282 - financial and legal means for environment protection; art. 284,	
			285, 287, 290, 291, 298 - fees for the use of the environment; art. 309,	
			313 - amount of penalties; art. 316, 317, 318, 319, 320, 321 - deferment, reduction and annulment of the increased fee for the use of	
			the environment and of administrative penalties; art. 323 - liability in	
			environment protection;	
			AW, art. 17, 18, 19, 20, 21, 22, 24 - obligations of holders of waste;	
			APAFL, art. 7, 10 - designation of agricult. and forest land for non- agricult./non-forest purposes;	
			BL, Chap. 1, art. 7 - general provisions;	
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APAFL - Act on the Prot	tection of Agricultural and Forest Lands (of 3.02.1995);
ALMR - Act on Land and	Mortgage Registers and on Mortgage (of 6.07.1982);
APN - Act on the Protect	tion of Nature;
APHM - Act on Preserva	tion of Historic Monuments (of 23.07.2003);
	perty Management (of 21.08.1997);
ASPD - Act on Spatial P	lanning and Development (of 27.03.2003);
AW - Act on Waste (of 2	
	of 7.07.1994) (changed 25.09.2005)
	ection Law (of 27.04.2001);
	d Cartographic Law (of 17.05.1989);
	d Mining Law (of 04.02.1994);
SA - Investment Suppor	rt Act (of 20.03.2001);
MA - Motorway Act (of 2	
	healthy and higiene during building works
	qualifing methods and basics in investor's estimation
PG - Payments Guarante	
POL - Public Order Law	(of 29.01.2004);

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	BL, Chap. 1, art. 4 - general provisions; Chap. 2, art. 17, 18, 19, 27 - independent technical functions in construction;		Act on engineering licenses and professional bodies - regulates rights and duties of architects, engineers and urban planners, of 15.12.2000, BL, Chap. 1, art. 4 - general provisions; Chap. 2, art. 17, 18, 19, 27 - independent technical functions in construction;
CONTRACT	Contractual relationship between Partners in the project	Contractual relationship between Partners in the project	Contractual relationship between Partners in the project

4	Financial assessment	ISA, art.2, 3, 4 - definitions, types of investment, eligible expenses;	ISA, art.10 - contractor ;	ISA, art.2, 3, 4 - definitions, types of investment, eligible expenses;
		 EPL, arts. 49, 50, 51, 52, 54, 55, 56, 57, 58, 60 - scope of the report on the environmental impact of an investment; arts. 71, 72, 73, 74, 75, 76 - environment protection in spatial development and during the execution of investments; arts. 272, 273, 274, 275, 276, 277, 278, 279, 280, 281, 282 - financial and legal means for environment protection; art. 284, 285, 287, 290, 291, 298 - fees for the use of the environment; arts. 309, 313 - amount of penalties; arts. 316, 317, 318, 319, 320, 321 - deferment, reduction and annulment of the increased fee for the use of the environment protection; AW, arts. 17, 18, 19, 20, 21, 22, 24 - obligations of holders of waste; 		
5	Formulation of goals and scope of the project	 FW, atts. 17, 18, 19, 20, 21, 22, 24 - obligations of holders of waste, EPL, art. 48 - proceedings concerning the impact on the environment of planned investments; art. 49, 50, 51, 52, 54, 55, 56, 57, 58, 60 - scope of the report on the environmental impact of an investment, art. 71, 72, 73, 74, 75, 76 - environment protection in spatial development and during the execution of investments; art. 272, 273, 274, 275, 276, 277, 278, 279, 280, 281, 282 - financial and legal means for environment protection; arts. 284, 285, 287, 290, 291, 292 - fees for the use of the environment; art. 309, 313 - amount of penalties; art. 316, 317, 318, 319, 320, 321 - deferment, reduction and annuiment of the increased fee for the use of the environment and of administrative penalties; art. 323 - liability in environment protection; AW, art. 17, 18, 19, 20, 21, 22, 24 - obligations of holders of waste; 		
6	Analysis of alternatives	 EPL, art. 48 - proceedings concerning the impact on the environment of planned investments; art. 49, 50, 51, 52, 54, 55, 56, 57, 58, 60 - scope of the report on the environmental impact of an investment, art. 71, 72, 73, 74, 75, 76 - environment protection in spatial development and during the execution of investments; art. 272, 273, 274, 275, 276, 277, 278, 279, 280, 281, 282 - financial and legal means for environment protection; art. 284, 285, 287, 280, 291, 298 - fees for the use of the environment, art. 309, 313 - amount of penalties; art. 316, 317, 318, 319, 320, 321 - deferment, reduction and annulment of the increased fee for the use of the environment protection; AW, art. 17, 18, 19, 20, 21, 22, 24 - obligations of holders of waste; 		

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APN - Act o	n the Protection of Nature;
APHM - Act	on Preservation of Historic Monuments (of 23.07.2003);
ARPM - Act	on Real Property Management (of 21.08.1997);
ASPD - Act	on Spatial Planning and Development (of 27.03.2003);
AW - Act on	Waste (of 27.04.2001);
BL - Act - Bu	uilding Law (of 7.07.1994) (changed 25.09.2005)
EPL - Enviro	onment Protection Law (of 27.04.2001);
GCL - Act -	Geodesic and Cartographic Law (of 17.05.1989);
GMW - Geo	technical and Mining Law (of 04.02.1994);
ISA - Invest	ment Support Act (of 20.03.2001);
MA - Motory	vay Act (of 27.10.1994);
OHHBW - C	ordinance on healthy and higiene during building works
	Ordinance on qualifing methods and basics in investor's estimation
PG - Payme	ents Guarantee (of 09.07.2003);
POL - Public	c Order Law (of 29.01.2004);

CONTRACT	Contractual relationship between Partners in the project	Contractual relationship between Partners in the project	Contractual relationship between Partners in the project
Legal regulations relevant to the role of P/C/E			Act on engineering licenses and professional bodies - regulates rights and duties of architects, engineers and urban planners, of 15.12.2000, BL, Chap. 1, art. 4 - general provisions; Chap. 2, art. 17, 18, 19, 27 - independent technical functions in construction;
CODIFICATION	P	С	E
ORGANIZATION	PUBLIC AGENCY	CONSTRUCTION COMPANY	CONSULTING ENGINEER COMPANY
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2 Period present of implementation plan EPL, art. 49, 50, 51, 52, 64, 57, 56, 67, 58, 60 - scope of the report on the environment protextion, part 2 at nivestment, art. 27, 27, 27, 27, 27, 27, 27, 27, 27, 27,	elated to works involving
2 DESIGN PHASE APHM, Chap. 3, Art. 25-37 - proceedings related to works involving 4, art. 34 - proceedings prior to the commentent of participants in the building process; Chap. 4, art. 34 - proceedings prior to the commentent of a daminument of participants in the building process; Chap. 4, art. 34 - proceedings prior to the commentent of a daminuments APHM, Chap. 3, Art. 25-37 - proceedings related to works involving 4, art. 34 - proceedings prior to the commentent of a daminuments	elated to works involving
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use of the environment, art. 309, 313 - amount of penalties; art. 316, 317, 318, 319, 320, 321 - deferment, reduction and annulment of the increased fee for the use of the environment and of administrative penalties; art. 323 - liability in environment and of administrative penalties; art. 323 - liability in environment protection; AW, art. 17, 18, 19, 20, 21, 22, 24 - obligations of holders of waste; B Formal acceptance of the project by EU relevant authority EPL, art. 49, 50, 51, 52, 54, 55, 56, 57, 58, 60 - scope of the report on the environment is: No. DESIGN PHASE ASPD, Chap. 1, art. 5, 6, 7, 9 - general provisions; Chap. 2, art. 12, 13 - independent technical functions; Chap. 3, art. 26-37 - proceedings related to works involving vorks; Chap. 5, 1- ocation of investment;	elated to works involving
2 B Formal acceptance of the project by EU relevant authority 317, 318, 319, 320, 321 - deferment, reduction and annulment of the increased fee for the use of the environment and of administrative penalties; art. 323 - liability in environment protection; AWV, art. 17, 18, 19, 20, 21, 22, 24 - obligations of holders of waste; AWV, art. 17, 18, 19, 20, 21, 22, 24 - obligations of holders of waste; 2 B Formal acceptance of the project by EU relevant authority EPL, art. 49, 50, 51, 52, 54, 55, 56, 57, 59, 60 - scope of the report on the environmental impact of an investment; APHM, Chap. 3, Art. 25-37 - proceedings related to works involving historic buildings and monuments APHM, Chap. 3, Art. 25-37 - proceedings related to works involving historic buildings and monuments APHM, Chap. 3, Art. 25-37 - proceedings related to works involving historic buildings and monuments APHM, Chap. 3, Art. 25-37 - proceedings related to works involving historic buildings and monuments	elated to works involving
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works; Chap. 5 - location of investment;	
APHM. Chao. 3. Art. 25-37 - proceedings related to works involving	
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1 Organization of the tender for the contract: AEC - POL, art. 2-6 - areas covered by the act; art. 7-10 - procurement rules; POL, art. 2-6 - areas covered by the act; art. 7-10 - procurement rules; POL, art. 2-6 - areas covered by the act; art.	t. 7-10 - procurement rules;
architecture / engineering / consulting (design team) or art. 11-13 - public tender notice; art. 14-21 - duties of the client; art. 22- art. 11-13 - public tender notice; art. 14-21 - duties of the client; art. 22- art. 14-21 - duties of the	- duties of the client; art. 22-
DESIGN-BUILT 28 - duties of the tenderer; art. 29-38 - preparation of the tender and 28 - duties of tender and 28 -	paration of the tender and
TOR; art. 39-81 - methods of procurement; art. 82-95 - chosing of the TOR; art. 39-81 - methods of procurement; art. 82-95 - chosing of the TOR; art. 39-81 - methods of procurement; art. 82-95 - chosing of the TOR; art. 39-81 - methods of procurement; art. 82-95 - chosing of the TOR; art. 39-81 - methods of procurement; art. 82-95 - chosing of the TOR; art. 39-81 - methods of procurement; art. 82-95 - chosing of the TOR; art. 39-81 - methods of procurement; art. 82-95 - chosing of the TOR; art. 39-81 - methods of procurement; art. 82-95 - chosing of the TOR; art. 39-81 - methods of procurement; art. 82-95 - chosing of the TOR; art. 39-81 - methods of procurement; art. 82-95 - chosing of the TOR; art. 39-81 - methods of procurement; art. 82-95 - chosing of the TOR; art. 39-81 - methods of procurement; art. 82-95 - chosing of the TOR; art. 39-81 - methods of procurement; art. 82-95 - chosing of the TOR; art. 39-81 - methods of procurement; art. 82-95 - chosing of the TOR; art. 39-81 - methods of procurement; art. 82-95 - chosing of the TOR; art. 39-81 - methods of procurement; art. 82-95 - chosing of the TOR; art. 39-81 - methods of procurement; art. 82-95 - chosing of the TOR; art. 39-81 - methods of procurement; art. 82-95 - chosing of the TOR; art. 39-81 - methods of procurement; art. 82-95 - chosing of the TOR; art. 39-81 - methods of procurement; art. 82-95 - chosing of the TOR; art. 39-81 - methods of procurement; art. 82-95 - chosing of the TOR; art. 39-81 - methods of procurement; art. 82-95 - chosing of the TOR; art. 39-81 - methods of procurement; art. 82-95 - chosing of the TOR; art. 39-81 - methods of procurement; art. 82-95 - chosing of the TOR; art. 39-81 - methods of procurement; art. 82-95 - chosing of the TOR; art. 39-81 - methods of procurement; art. 82-95 - chosing of the TOR; art. 39-81 - methods of procurement; art. 82-95 - chosing of the TOR; art. 39-81 - methods of procurement; art. 82-95 - chosing of the TOR; art. 39-81 - methods of procurement; art. 82-95 - chosing of the TOR; art. 39-81	
best offer; art. 96-98 - tender documents; art. 118-121 - concessions; best offer; art. 96-98 - tender documents; art. 161-171 - control of best offer; art. 96-98 - tender documents; arc	
art. 161-171 - control of procurement; art. 179-198 - legal protection; procurement; art. 179-198- legal protection; art. 199-203 - legal procurement; art. 179-198 - legal protection;	ı; art. 199-203 - legal
art. 199-203 - legal resposibilities; resposibilities; resposibilities;	
MA, art. 40-53 - tender for construction and design for motorways MA, art. 40-53 - tender for construction and design for motorways; MA, art. 40-53 - tender for construction and	I design for motorways;
1 Choosing the form of the contract	
2 Running the tender for the contract by the client POL, art. 2-6 - areas covered by the act; art. 7-10 - procurement rules; POL, art. 2-6 - areas covered by the act; art. 7-10 - procurement rules; POL, art. 2-6 - areas covered by the act; art.	t. 7-10 - procurement rules;
art, 11-13 - public tender notice; art, 14-21 - duties of the client; art, 22- lart, 11-13 - public tender notice; art, 14-21 - duties of the client; art, 22- lart, 11-13 - public tender notice; art, 14-21 -	
28 - duties of the tenderer; art. 29-38 - preparation of the tender and 28 - duties of the tenderer: art. 29-38 - preparation of the tender and 28 - duties of the tenderer; art. 29-38 - preparation of the tender and 28 - duties of the tenderer; art. 29-38 - preparation of the tender and 28 - duties of the tenderer; art. 29-38 - preparation of the tender and 28 - duties of tender and 28 - d	
TOR; art. 39-81 - methods of procurement; art. 82-95 - chosing of the TOR; art. 39-81 - methods of procurement; art. 82-95 - chosing of the TOR; art. 39-81 - methods of procurement;	art. 82-95 - chosing of the
best offer; art. 96-98 - tender documents; art. 118-121 - concessions; best offer; art. 96-98 - tender documents; art. 118-121 - concessions; best offer; art. 96-98 - tender documents; art	rt. 118-121 - concessions;
art. 161-171 - control of procurement; art. 179-198 - legal protection; art. 161-171 - control of procurement; art. 179-198 - legal protection; art. 161-171 - control of procurement; art. 179-198 - legal protection;	79-198 - legal protection;
art. 199-203 - legal resposibilities; art. 199-203 - legal resposibilities; art. 199-203 - legal resposibilities;	
MA, art. 40-53 - tender for construction and design for motorways; MA, art. 40-53 - tender for construction and design for motorways; MA, art. 40-53 - tender for construction and	I design for motorways;
3 Choosing the relevant company	

ain Acts of Polish Parliament concerning investment process in construction:
PUORP - Act on the Acquisition by Perpetual Usufructuaries of the Ownership of Real
operty (of 26.07.2001);
PAFL - Act on the Protection of Agricultural and Forest Lands (of 3.02.1995);
MR - Act on Land and Mortgage Registers and on Mortgage (of 6.07.1982);
PN - Act on the Protection of Nature;
PHM - Act on Preservation of Historic Monuments (of 23.07.2003);
RPM - Act on Real Property Management (of 21.08.1997);
SPD - Act on Spatial Planning and Development (of 27.03.2003);
V - Act on Waste (of 27.04.2001);
- Act - Building Law (of 7.07.1994) (changed 25.09.2005)
PL - Environment Protection Law (of 27.04.2001);
CL - Act - Geodesic and Cartographic Law (of 17.05.1989);
/W - Geotechnical and Mining Law (of 04.02.1994);
A - Investment Support Act (of 20.03.2001);
A - Motorway Act (of 27.10.1994);
HBW - Ordinance on healthy and higiene during building works
QMBIE - Ordinance on qualifing methods and basics in investor's estimation
G - Payments Guarantee (of 09.07.2003);
DL - Public Order Law (of 29.01.2004);

DENOMINATION USED IN THESE PROCEDURES	CLIENT	CONTRACTOR	ENGINEER / DESIGNER / CONSULTANT
OTHER DENOMINATIONS	PROMOTER - OWNER - DEVELOPER - EMPLOYER		DIRECTOR (INSPECTOR OR SUPERVISOR) OF WOKS - CONSULTANT - PROJECT MANAGER
ORGANIZATION	PUBLIC AGENCY	CONSTRUCTION COMPANY	CONSULTING ENGINEER COMPANY
CODIFICATION	Р	C	E
relevant to the role of P/C/E	independent technical functions in construction;	and duties of architects, engineers and urban planners, of 15.12.2000, BL, Chap. 1, art. 4 - general provisions; Chap. 2, art. 17, 18, 19, 27 - independent technical functions in construction;	Act on engineering licenses and professional bodies - regulates rights and duties of architects, engineers and urban planners, of 15.12.2000, BL, Chap. 1, art. 4 - general provisions; Chap. 2, art. 17, 18, 19, 27 - independent technical functions in construction;
CONTRACT	Contractual relationship between Partners in the project	Contractual relationship between Partners in the project	Contractual relationship between Partners in the project

	4	Signing the contract with the relevant company	POL, art. 94, 139-151 - agreements;	POL, art. 94, 139-151 - agreements;	POL, art. 94, 139-151 - agreements;	
			MA, art. 61-63 - agreements for motorway construction and operation			
2	1	Organization of the design team Appointment of the design team manager				
	2	Scope definition				
	3	Activity planning				
	4	Resource planning (for the design team)				
	5	Cost estimating	OQMBIE, chap. 2, Methods and basics of making estimation cost, chap.3, Methods and basics of calculating planned building works costs', chap. 4, Methods and basics of calculating planned project costs'			
	6	Schedule development (for design)				
	7	Setting the hierarchic structure of the design project				
	8	Setting the co-operation structure of the design project				
3		Development of design				
	1 2	Surveying Basic information: urban planning, geology, hidrology, etc.				
		Environmental analysis				
	4	Calculations				
	5	Drafting				
	6	Technical specifications	POL, art. 36 - TOR;		POL, art. 36 - TOR;	
	7	Scheduling and resource planning (for construction)				
	8	Quality management plan				
	9 10	Health and safety plan Budgeting				
		Draft documents - editing, printing and binding				
		Shark abbarriorito - bararig, printing and binarig				
4		Control of design				
		Control of resources				
	2	Control of quality (ISO 9000)				
	3	Control of time				
	4 5	Control of costs Control of changes				
	5	Control of Changes				
5		Approval of the relevant documents by the local authority	BL, Chapter 4	BL, Chapter 4	BL, Chapter 4	

Main A	Acts of Polish Parliament concerning investment process in construction:
AAPU	ORP - Act on the Acquisition by Perpetual Usufructuaries of the Ownership of Real
Prope	rty (of 26.07.2001);
APAF	L - Act on the Protection of Agricultural and Forest Lands (of 3.02.1995);
ALMR	- Act on Land and Mortgage Registers and on Mortgage (of 6.07.1982);
APN -	Act on the Protection of Nature;
APHN	 Act on Preservation of Historic Monuments (of 23.07.2003);
ARPM	 Act on Real Property Management (of 21.08.1997);
ASPD	- Act on Spatial Planning and Development (of 27.03.2003);
AW - /	Act on Waste (of 27.04.2001);
BL - A	ct - Building Law (of 7.07.1994) (changed 25.09.2005)
EPL -	Environment Protection Law (of 27.04.2001);
GCL -	Act - Geodesic and Cartographic Law (of 17.05.1989);
GMW	- Geotechnical and Mining Law (of 04.02.1994);
ISA - I	investment Support Act (of 20.03.2001);
MA - N	Motorway Act (of 27.10.1994);
OHHB	W - Ordinance on healthy and higiene during building works
OQME	BIE - Ordinance on qualifing methods and basics in investor's estimation
PG - F	Payments Guarantee (of 09.07.2003);
POL -	Public Order Law (of 29.01.2004);

DENOMINATION USED IN THESE PROCEDURES	CLIENT	CONTRACTOR	ENGINEER / DESIGNER / CONSULTANT
OTHER DENOMINATIONS	PROMOTER - OWNER - DEVELOPER - EMPLOYER		DIRECTOR (INSPECTOR OR SUPERVISOR) OF WOKS - CONSULTANT - PROJECT MANAGER
ORGANIZATION	PUBLIC AGENCY	CONSTRUCTION COMPANY	CONSULTING ENGINEER COMPANY
CODIFICATION	Р	С	E
	BL, Chap. 1, art. 4 - general provisions; Chap. 2, art. 17, 18, 19, 27 - independent technical functions in construction;	Act on engineering licenses and professional bodies - regulates rights and duties of architects, engineers and urban planners, of 15.12.2000, BL, Chap. 1, art. 4 - general provisions; Chap. 2, art. 17, 18, 19, 27 - independent technical functions in construction;	Act on engineering licenses and professional bodies - regulates rights and duties of architects, engineers and urban planners, of 15.12.2000, BL, Chap. 1, art. 4 - general provisions; Chap. 2, art. 17, 18, 19, 27 - independent technical functions in construction;
CONTRACT	Contractual relationship between Partners in the project	Contractual relationship between Partners in the project	Contractual relationship between Partners in the project
	MAIN LEGAL REGULATIONS		

6		Closing – out and handing over (of design documents)			
	1 2 3 4 5 6 7	Inspection by client Implementation of changes due to inspection by client Final documents - editing, printing and binding Approval by client Formal handing over of the design project Taking over of the design project by the client Economic close-out of the contract (final payment and release of retainage or warranty)			
3		PRE-CONSTRUCTION PHASE			
1		Organisation of the tender for engineer (consulting engineering company)		sing of the TOR; art. 39-81 - methods of procurement; art. 82-95 - chosing of best offer; art. 96-98 - tender documents; art. 118-121 - concess	 t. 22- art. 11-13 - public tender notice; art. 14-21 - duties of the client; art. 22- nd 28 - duties of the tenderer, art. 29-38 - preparation of the tender and the TOR; art. 39-81 - methods of procurement; art. 82-95 - chosing of the sise toffer; art. 96-98 - tender documents; art. 118-121 - concessions;
			MA, art. 40-53 - tender for construction and design for mot	· · · · · · · · · · · · · · · · · · ·	, ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,
			ALMR, art. 1,4,5,7,10,16, 17, 85-86 - Vol. I: concerns the le the acquisition of the real property; GCL, Chap. I, II, III, IV, V, VI, art. 1-4, 7, 7a, 7d, 11, 15, 20 31-32 - concerns general provisions related to the executio geodesic and cartographic works, principles for the registry buildings, administrative bodies, inventories and registries networks of utilities, principles for the delimitation of areas;	n of r of land and	vorks, 32 - concerns general provisions related to the execution of geodesic
			ARPM, Vol. II: Chap. 3,4,7,8; Vol. III: Chap. 1,4,5; Vol. IV: Dział V: Chap. 3,4 - concerns the principles for managing r owned by the State Treasury and territorial self-governmer selling of real property and awarding the right of perpetual provisions of awarding, restricting and revoking various rig property, principles for the evaluation of real property;	eal property it units, usufruct, hts to real	
			AAPUORP, art. 1 - concerns the principles for the acquisiti perpetual usufructaries of the ownership of real property;	on by	
		Running the tender for engineer (consulting engineering company) by the client Choosing the engineer (consulting engineering company) Signing the contract with the consulting engineering company			

Main Acts c	of Polish Parliament concerning investment process in construction:
AAPUORP	- Act on the Acquisition by Perpetual Usufructuaries of the Ownership of Real
Property (of	f 26.07.2001);
APAFL - A	ct on the Protection of Agricultural and Forest Lands (of 3.02.1995);
ALMR - Act	on Land and Mortgage Registers and on Mortgage (of 6.07.1982);
APN - Act c	on the Protection of Nature;
APHM - Act	t on Preservation of Historic Monuments (of 23.07.2003);
ARPM - Act	t on Real Property Management (of 21.08.1997);
ASPD - Act	on Spatial Planning and Development (of 27.03.2003);
AW - Act or	n Waste (of 27.04.2001);
BL - Act - B	uilding Law (of 7.07.1994) (changed 25.09.2005)
EPL - Envir	onment Protection Law (of 27.04.2001);
GCL - Act -	Geodesic and Cartographic Law (of 17.05.1989);
GMW - Geo	otechnical and Mining Law (of 04.02.1994);
ISA - Invest	tment Support Act (of 20.03.2001);
MA - Motor	way Act (of 27.10.1994);
	Ordinance on healthy and higiene during building works
	Ordinance on qualifing methods and basics in investor's estimation
	ents Guarantee (of 09.07.2003);
POL - Publi	ic Order Law (of 29.01.2004);

DENOMINATION USED IN THESE PROCEDURES	CLIENT	CONTRACTOR	ENGINEER / DESIGNER / CONSULTANT
OTHER DENOMINATIONS	PROMOTER - OWNER - DEVELOPER - EMPLOYER		DIRECTOR (INSPECTOR OR SUPERVISOR) OF WOKS - CONSULTANT - PROJECT MANAGER
ORGANIZATION	PUBLIC AGENCY	CONSTRUCTION COMPANY	CONSULTING ENGINEER COMPANY
CODIFICATION	Р	С	E
Legal regulations relevant to the role of P/C/E	BL, Chap. 1, art. 4 - general provisions; Chap. 2, art. 17, 18, 19, 27 - independent technical functions in construction;	Act on engineering licenses and professional bodies - regulates rights and duties of architects, engineers and urban planners, of 15.12.2000, BL, Chap. 1, art. 4 - general provisions; Chap. 2, art. 17, 18, 19, 27 - independent technical functions in construction;	Act on engineering licenses and professional bodies - regulates rights and duties of architects, engineers and urban planners, of 15.12.2000, BL, Chap. 1, art. 4 - general provisions; Chap. 2, art. 17, 18, 19, 27 - independent technical functions in construction;
CONTRACT	Contractual relationship between Partners in the project	Contractual relationship between Partners in the project	Contractual relationship between Partners in the project

2		Organisation of the tender for contractor (construction company) (if the DESIGN-BUILT contract was NOT chosen in point 2.1)	POL, art. 118-121 - concessions;	POL, art. 118-121 - concessions;	POL, art. 118-121 - concessions;
	1	Choosing the tender method for constractor			
	2	Running the tender for contractor			
	3	Choosing the contractor			
	4	Signing the contract with the construction company			
.		CONSTRUCTION PHASE	PL Chap 3 art 25 26 27 rights and ablig actions of participants in	PL Chap 2 art 12 12b 12 14 independent technical functions in	PL Chap 2 art 10 12 12b 12 14 independent technical functions
			the building process; Chap. 4, art. 28, 29, 30, 31, 32, 33, 36a, 37, 39, 39a - proceedings prior to the commencement of construction works; Chap. 5, art. 41, 42, 43, 44, 46, 47, 56, 57, 59c - construction of buildings and putting them into use;	construction; Chap. 3, art. 21a, 22, 23 - rights and obligations of participants in the building process; Roz. 4, art. 36a - proceedings prior to the commencement of construction works; Roz. 5, art. 41, 43, 45, 46 - construction of buildings and putting them into use;	
1		Organization of the construction works			GCL, Chap. 7: concerns professional qualifications to carry out independent functions in the field of geodesy and cartography;
	1 2	Appointment of the construction team manager Appointment of the other key persons of the construction team			
	3	Planning the cost			
	4	Creation of the schedule for the construction works			
	5	Task division between contractors			
	6	Choosing the suppliers and subcontractors			
	7	Contracting the goods and services			
	8	Setting the health and safety plan			
	9	Setting the quality management plan			
2		Preparation of the construction site	OHHBW, chap. 2, conditions of preparing and leading building works, chap. 3, implemetetions of building site, chap. 4, social and hygenic conditions. Besides Ordinance traets about condition of different kindes of building works according to its safe and healthy		
	1	Surveying			
	2	Jobsite access			
	3	Grading			
	4	Jobsite space allocation			
	5	Temporary facilites			
	6	Jobsite security (temporary fencing, security personnel, signade			
	_	and barricades, etc.)			
	1	Other			
3		Development of relevant construction works			

AAPUORP - Act on the Acquisition by Perpetual Usufructuaries of the Ownership of Real Property (of 26.07.2001); APAFL - Act on the Protection of Agricultural and Forest Lands (of 3.02.1995); ALMR - Act on the Protection of Agricultural and Forest Lands (of 6.07.1982); APN - Act on Land and Mortgage Registers and on Mortgage (of 6.07.1982); APN - Act on Land and Mortgage Registers and on Mortgage (of 6.07.1982); APN - Act on Real Property Management (of 21.08.1997); ASPD - Act on Real Property Management (of 21.08.1997); ASPD - Act on Spatial Planning and Development (of 27.03.2003); AV - Act on Vaste (of 27.04.2001); BL - Act - Building Law (of 7.07.1994) (changed 25.09.2005) EPL - Environment Protection Law (of 27.04.2001); GCL - Act - Geodesic and Cartographic Law (of 17.05.1989); GMW - Geotechnical and Mining Law (of 04.02.1994); ISA - Investment Support Act (of 20.03.2001); MA - Motorway Act (of 27.10.1994); OHHBW - Ordinance on healthy and higiene during building works
APÅFI ² - Åct on the Protection of Agricultural and Forest Lands (of 3.02.1995); ALMR - Act on Land and Mortgage Registers and on Mortgage (of 6.07.1982); APN - Act on the Protection of Nature; APHM - Act on Preservation of Historic Monuments (of 23.07.2003); ARPM - Act on Real Property Management (of 21.08.1997); ASPD - Act on Spatial Planning and Development (of 27.03.2003); AV - Act on Vaste (of 27.04.2001); BL - Act - Building Law (of 7.07.1994) (changed 25.09.2005) EPL - Environment Protection Law (of 27.04.2001); GCL - Act - Geodesic and Cartographic Law (of 17.05.1989); GMW - Geotechnical and Mining Law (of 04.02.1994); ISA - Investment Support Act (of 20.03.2001); MA - Motorway Act (of 27.01.994); OHHBW - Ordinance on healthy and higiene during building works
ALMR - Act on Land and Mortgage Registers and on Mortgage (of 6.07.1982); APN - Act on the Protection of Nature; APHM - Act on Preservation of Historic Monuments (of 23.07.2003); ARPM - Act on Real Property Management (of 21.08.1997); ASPD - Act on Spatial Planning and Development (of 27.03.2003); AW - Act on Waste (of 27.04.2001); BL - Act - Building Law (of 7.07.1994) (changed 25.09.2005) EPL - Environment Protection Law (of 27.04.2001); GCL - Act - Geodesic and Cartographic Law (of 17.05.1989); GMW - Geotechnical and Mining Law (of 04.02.1994); ISA - Investment Support Act (of 20.03.2001); MA - Motorway Act (of 27.10.1994); OHHBW - Ordinance on healthy and higiene during building works
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APHM - Act on Preservation of Historic Monuments (of 23.07.2003); ARPM - Act on Real Property Management (of 21.08.1997); ASPD - Act on Spatial Planning and Development (of 27.08.2003); AW - Act on Waste (of 27.04.2001); BL - Act - Building Law (of 7.07.1994) (changed 25.09.2005) EPL - Environment Protection Law (of 27.04.2001); GCL - Act - Geodesic and Cartographic Law (of 17.05.1989); GMW - Geotechnical and Mining Law (of 40.20.1994); ISA - Investment Support Act (of 20.03.2001); MA - Motorway Act (of 27.10.1994); OHHBW - Ordinance on healthy and higiene during building works
ARPM - Act on Real Property Management (of 21.08.1997); ASPD - Act on Spatial Planning and Development (of 27.03.2003); AW - Act on Waste (of 27.04.2001); BL - Act - Building Law (of 7.07.1994) (changed 25.09.2005) EPL - Environment Protection Law (of 27.04.2001); GCL - Act - Geodesic and Cartographic Law (of 17.05.1989); GMW - Geotechnical and Mining Law (of 04.02.1994); ISA - Investment Support Act (of 20.03.2001); MA - Motorway Act (of 27.10.1994); OHHBW - Ordinance on healthy and higiene during building works
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DENOMINATION USED IN THESE PROCEDURES	CLIENT	CONTRACTOR	ENGINEER / DESIGNER / CONSULTANT
OTHER DENOMINATIONS	PROMOTER - OWNER - DEVELOPER - EMPLOYER		DIRECTOR (INSPECTOR OR SUPERVISOR) OF WOKS - CONSULTANT - PROJECT MANAGER
ORGANIZATION	PUBLIC AGENCY	CONSTRUCTION COMPANY	CONSULTING ENGINEER COMPANY
CODIFICATION	Р	C	E
	independent technical functions in construction;	Act on engineering licenses and professional bodies - regulates rights and duties of architects, engineers and urban planners, of 15.12.2000, BL, Chap. 1, art. 4 - general provisions; Chap. 2, art. 17, 18, 19, 27 - independent technical functions in construction;	Act on engineering licenses and professional bodies - regulates rights and duties of architects, engineers and urban planners, of 15.12.2000, BL, Chap. 1, art. 4 - general provisions; Chap. 2, art. 17, 18, 19, 27 - independent technical functions in construction;
CONTRACT	Contractual relationship between Partners in the project	Contractual relationship between Partners in the project	Contractual relationship between Partners in the project
	MAIN LEGAL REGULATIONS		

r						1
4		Control of construction works				APHM, Chap. 4, Art. 38-50 - conservator's control and supervision
	1	Control of resources				
	2	Control of deliveries and suppliers				
	3	Control of quality (iso 9000)				
	4	Control of health and safety				
	5	Control of environmental issues				
	6	Control of time				
	7	Control of costs / budget				
	8	Control of changes				
	0	control of ondinges				
5		HANDING OVER AND START-UP PHASE	BL, Chap. 5, art. 60 -	construction of buildings and putting them into		
-			use;	0 1 0		
1		Closing – out and handing over		29, 35, 65, 68, 79 - concerns the rules for		
				and securing land and mortgage registers, and		
				h mortgage debts, as well as obligations of the		
			owner of real property	5		
	1	Contractor notifies the termination of construction works				
	2	Consultant inspects the infrastructure				
	3	Consultant compiles a list of remaining works (or repairs) to be				
		done				
	4	Contractor completes the remaing works or makes the repairs				
	5	Engineer issues certificate of substantial completion				
	6	Formal handing over of the infrastructure				
	7	Taking over of the infrastructure by the client				
	8	Economic close-out of the contract between client and	PG art 1-6 - navmen	s for construction works;	PG, art. 1-6 - payments for construction works, Contractual	
	Ŭ	contractor, or when apply – client represented by consultant	r o, ura r o "paymon		relationshing finish between Client and Construction Company;	
		(final payment and release of retainage or warranty)			relationship hillsh between olient and oblistituction company,	
	9	Termination of direction works				
	10	Economic close-out of the contract between client and				PG, art. 1-6 - payments for construction works, Contractual
		consultant (final payment and release of retainage or warranty)				relationshinp finish between Client and Consulting Engineering
						Company;
2		Start-up of the infrastructure operations		ncerns the principles for the acquisition by		
			perpetual usufructarie	s of the ownership of real property;		
		ч — Ц			•	

ANNEX 2: PORTUGUESE PROCEDURES

Decree-Law:	which has been altered by the following laws:	and revokes the following laws:	Description
DL 59/99 (2 Mar)	DL 159/2000 (27 Jun); DL 163/99 (14 Set); DL 245/2003 (7 Oct).		Law set on public contracts
DL 197/99 (8 Jun)	DL 1/2005 (4 Jan)	DL 55/95 (29 Mar)	Law set on public expenditures for location and aquisition of goods and services as well as for public contracting.
P 104/2001 (21 Fev)	P. 1075/2005 (19 Oct); P. 3/2002 (4 Jan); P. 1465/2002 (14 Nov).	P. 428/1995 (10 May)	Typcal tender programmes and typical tender specifications for lump sum contracts and bill of quantity contracts with design issued by the client and in pecentage public tender arrangements.
P 1101/2000 (20 Nov)	P 1104/2001 (17 Set); P 69/2003 (20 Jan).		Annex of the legal dispositions aplicable to design and construction works
DL 273/2003, (29 Oct)	regulated by P. 101/96(3Apr)	DL 155/95 (1 Jul)	General rules of planning, organizing and coordinating for promoting Safety, Higiene&Health on the construction site connected with the minimum prescriptions required for temporary/mobile construction sites
D 41821 (11 Aug 1958)			Work safety regulation for building construction
DL 46427 (10 Jul 1965)			Regulation regarding the temporary instalations for the construction workers employed
DL 441/91 (14 Nov)			General principles for the promotion of Health, Hygiene & Safety at work
DR 33/88 (12 Set)			Regulation on construction signalling and ocasional obstacles on public roads
P 1456 A/95 (11 Dec)			Minimum prescriptions on setting and using Health & Safety signalling at work
DL 141/95 (14 Jun)		DL 310/86 (23 Set)	Coordination of the Health & Safety signalling at work
P 987/93 (6 Oct)			Health & Safety minimum prescriptions for the work site
P 101/96 (3 Apr)			Health & Safety minimum prescriptions for temporart/mobile construction sites.
DL 76/2002 (26 Mar)			Regulation on noise emission into the environment by equipment for exterior use
Lei 11/87 (7 Apr)			Environmental foundation law
DL 186/90 (6 Jun)	DL 278/97 (8 Oct)		Standards regarding the appraisal of the effects on the environment by certain private and public projects.
DR 38/90 (27 Nov)			Evaluation of the environmental impact (AIA) of projects that confirm significante impacts on the environment
DL 69/2000 (3 May)			Law set for the Evaluation of the environmental impact of public and private projects susceptible of producing significante efects on the environment.
DL 38382 (7 Aug 1971)	Dec 38 888 (29 Ago 1952); DL 44258 (31 Mar 1962); DL 45027 (13 Mai 1963); DL 650/75 (18 Nov); DL 463/85 (4 Nov); DL 64/90 (21 Fev); DL 61/93 (3 Mar).		RGEU - General Regulations of Urban Buildings [new version soon: RGE]
DL 310/90 (1 Oct)			Setting up the LNEC Quality trade-mark
DL 380/1999 (22 Set)	DL 53/2000 (7 Abr)	DL 176-A/88 (18 May); DL 151/95 (24 Jun); DL 69/90 (2 Mar).	Law set on the territorial management tools

	SEC - Section; CAP - Chapter	CLIENT		CONSULTING ENGINEER COMPANY
	DL - Decree-Law; P - Law; DEC - Law; DR - Ruling Decree	PUBLIC AGENCY	CONTRACTOR	DIRECTOR (INSPECTOR OR SUPERVISOR) OF WORKS - CONSULTANT PROJECT MANAGER
Green Shade: illustrates the entity involved		PROMOTER - OWNER - DEVELOPER - EMPLOYER	CONSTRUCTION COMPANY	ENGINEER / DESIGNER / CONSULTANT
	CONCEPTUAL PHASE			
	Initiation of the project	Roads: DL 182/2003 (DL 222/98): Plano Rodoviário Nacional; DL 380/1999: Law set on the territorial management tools		Roads: DL 182/2003 (DL 222/98): Plano Rodoviário Nacional; D 380/1999: Law set on the territorial management tools
1	Analysis of needs	General urban law		General urban law
2	Constraints identification	Local authority urban law		Local authority urban law
3	Conception of the project	Design rules		Design rules
4	Financial assessment	Environmental impact law		Environmental impact law
5	Formulation of goals and scope of the project	Regulations on cuncurrence		Regulations on cuncurrence
6	Analysis of alternatives	Rules on project submission to EU		Rules on project submission to EU
7	Development of implementation plan			
8	8 Formal acceptance of the project by EU relevant authority			
	DESIGN PHASE			
	Organization of the tender for the contract: AEC - architecture / engineering / consulting (design team) or DESIGN-BUILT	DL 197/99: CAP III - Types and selection of tender [Art 78 to 86]; CAP V - Tender limited by pre-qualification and CAP VII - Tender by negotiation with publication requirements: Delivery, appraisal and selection of candidates phases [Art 115 to 126, Art 137 to 145]; CAP IX -Prior consultation [Art 168 - Appraisal of proposals; Art 160 - Final report and selection of contractor		DL 197/99: CAP III - Types and selection of tender [Art 78 to 86] CAP V - Tender limited by pre-qualification and CAP VII - Tende by negotiation with publication requirements: Delivery, appraisal and selection of candidates phases [Art 115 to 126, Art 137 to 1- CAP IX - Prior consultation [Art 158 - Appraisal of proposals; Art - Final report and selection of contractor
1	Choosing the form of the contract			
2	Running the tender for the contract by the client			
3	Choosing the relevant company			
4	Signing the contract with the relevant company			
2	Organization of the design team	DL 197/99: CAP XIII - Special communitarian dispositions: Art 190 to 199; Art 191- Service supply and design works. Art 192 - Co- service contracts.		DL 197/99: CAP XIII - Special communitarian dispositions: A 190 to 199; Art 191- Service supply and design works. Art 192 - service contracts.
1	Appointment of the design team manager			
2	Scope definition			
3	Activity planning			
4	Resource planning (for the design team)			
5	Cost estimating			
6	Schedule development (for design)			
7	Setting the hierarchic structure of the design project			
8	Setting the co-operation structure of the design project			
3	Development of design			
1	Surveying	DL 38382: RGEU - General Regulations of Urban Buildings		DL 38382: RGEU - General Regulations of Urban Buildings
2	Basic information: urban planning, geology, hidrology, etc.	Local Urban Regulations		Local Urban Regulations

	SEC - Section; CAP - Chapter	CLIENT		CONSULTING ENGINEER COMPANY
1	DL - Decree-Law; P - Law; DEC - Law; DR - Ruling Decree	PUBLIC AGENCY	CONTRACTOR	DIRECTOR (INSPECTOR OR SUPERVISOR) OF WORKS - CONSULTANT - PROJECT MANAGER
(Green Shade: illustrates the entity involved	PROMOTER - OWNER - DEVELOPER - EMPLOYER	CONSTRUCTION COMPANY	ENGINEER / DESIGNER / CONSULTANT
3	Environmental analysis	DL 76/2002: Regulation on noise emission into the environment by equipment for exterior use; Law 11/87: Environmental foundation law; P1101/2000: Cap V Environment, natural resources, architectural and archaeological heritage: Art 5.1 to 5.7 and Sec III Noise Polution: Art 11.7; DL 166/90 and DL 278/97: Standards regarding the appraisal of the effects on the environment by certain private and public projects; DR 38/90: Evaluation of the environmental impact (AIA) of projects that confirm significante impacts on the environment, DL 69/2000: Law set for the Environmental Impact Valuation of public and private projects susceptible of producing significante efects on the environment.		DL 76/2002: Regulation on noise emission into the environment by equipment for exterior use; Law 11/87: Environmental foundation law; P1101/2000: Cap V Environment, natural resources, architectural and archaeological heritage: Art 5.1 to 5.7 and Sec III Noise Polution: Art 11.7; DL 186/90 and DL 278/97: Standards regarding the appraisal of the effects on the environment by certai private and public projects; DR 38/90: Evaluation of the environmental impact (AIA) of projects that confirm significante impacts on the environment, DL 69/2000: Law set for the Environmental Impact Valuation of public and private projects susceptible of producing significante efects on the environment.
4	Calculations	Specific design standards		Specific design standards
5 (Drafting	EUROCODES		EUROCODES
6 -	Technical specifications	Material specifications		Material specifications
7	Scheduling and resource planning (for construction)			
8	Quality management plan	Codes of Practice		Codes of Practice
	Health and safety plan	DL 273/2003: Art 5 - Health & Safety Planning at work; DL 441/91: General principles for the promotion of Safety, health and hygiene at work; Dec 41821: Work safety regulation for building construction; P 987/93: Health & Safety minimum prescriptions for the work site; P 101/96: Health & Safety minimum prescriptions in work locations in temporary or mobile construction sites; P 104/2001: SEC I Clause 8.3 - Safety, health and hygiene at work and SEC II Clause 4.1.2- Planning construction works; P 1101/2000: CAP XI Construction - SEC I Safety: Art 11.1 and 11.2		DL 273/2003: Art 5 - Health & Safety Planning at work; DL 441/91 General principles for the promotion of Safety, health and hygiene at work; Dec 41821: Work safety regulation for building construction; P 987/93: Health & Safety minimum prescriptions for the work site; P 101/96: Health & Safety minimum prescriptions in work locations in temporary or mobile construction sites; P 104/2001: SEC I Clause 8.3 - Safety, health and hygiene at work and SEC II Clause 4.1.2- Planning construction works; P 1101/2000: CAP XI Construction - SEC I Safety: Art 11.1 and 11.2
10	Budgeting			
11 [Draft documents - editing, printing and binding			
0	Control of design			
1 (Control of resources			
	Control of quality (ISO 9000)	DL 310/90: LNEC Quality trade-mark; P1101/2000: CAP I - SEC VII Construction Quality: Art 1.16		DL 310/90: LNEC Quality trade-mark; P1101/2000: CAP I - SEC VII Construction Quality: Art 1.16
3	Control of time			
	Control of costs			
5 (Control of changes			
	Approval of the relevant documents by the local authority			
0	Closing – out and handing over (of design documents)			
1	Inspection by client			
2	Implementation of changes due to inspection by client			
3	Final documents - editing, printing and binding			
4	Approval by client			
5 I	Formal handing over of the design project			
6 -	Taking over of the design project by the client			

		SEC - Section; CAP - Chapter	CLIENT		CONSULTING ENGINEER COMPANY
		DL - Decree-Law; P - Law; DEC - Law; DR - Ruling Decree	PUBLIC AGENCY	CONTRACTOR	DIRECTOR (INSPECTOR OR SUPERVISOR) OF WORKS - CONSULTANT - PROJECT MANAGER
		Green Shade: illustrates the entity involved	PROMOTER - OWNER - DEVELOPER - EMPLOYER	CONSTRUCTION COMPANY	ENGINEER / DESIGNER / CONSULTANT
	7	Economic close-out of the contract between the contractor and the client or when apply - client represented by the consultant(final payment and release of retainage or warranty)			
3		PRE-CONSTRUCTION PHASE			
1		Organisation of the tender for engineer (consulting engineering company)	DL 197/99: Art 166 - Admission of candidates; Art 169 - Advertisement; Art 170 Jury; Art 173 - Project appraisal and ranking; Art 174 - Public session; Art 175 Candidate appraisal; Art 176 Report		DL 197/99: Art 166 - Admission of candidates; Art 169 - Advertisement; Art 170 Jury; Art 173 - Project appraisal and ranking; Art 174 - Public session; Art 175 Candidate appraisal; Art 176 Report
	1	Running the tender for engineer (consulting engineering company) by the client $% \left({{{\left[{{{c}_{{\rm{s}}}} \right]}}} \right)$			
	2	Choosing the engineer (consulting engineering company)			
	3	Signing the contract with the consulting engineering company			
2		Organisation of the tender for contractor (construction company) (if the DESIGN-BUILT contract was NOT chosen in point 2.1)	Art 48 - Selecting type of tender]. CAP I SEC II- Tender formalities	Art 48 - Selecting type of tender]. CAP I SEC II- Tender formalities and procedures; CAP II - Candidates; CAP III - Public tender [SEC I	DL 59/99: Title III - Contract Formulation [Art 47 - Type of tender; Art 48 - Selecting type of tender]. CAP I SEC II- Tender formalities and procedures; CAP II - Candidates; CAP III - Public tender [SEC I VI: Art 49 to 97 and SEC VI-XI]; CAP IV - Limited tender; CAP V - Tender by negotiation; CAP VI - Direct award; CAP VII - Dispositions regarding percentage contracts: Art 98 to Art 139.
	1	Choosing the tender method for constractor			
	2	Running the tender for contractor			
	3	Choosing the contractor			
	4	Signing the contract with the construction company			
4		CONSTRUCTION PHASE			
1		Organization of the construction works			
	1	Appointment of the construction team manager			
	2	Appointment of the other key persons of the construction team			
	3	Planning the cost			
	4	Creation of the schedule for the construction works		DL 59/99: Art 63 - Design components; Art 73 - Tender documents	DL 59/99: Art 63 - Design components; Art 73 - Tender documents
	5	Task division between contractors			
	6	Choosing the suppliers and subcontractors			
	7	Contracting the goods and services	DL 59/99: Artigo 5 - Mixed Contracts	DL 59/99: Artigo 5 - Mixed Contracts	DL 59/99: Artigo 5 - Mixed Contracts
	8	Setting the health and safety plan	the Health & Safety plan for construction works. Artigo 12 - Aproval of the Health & Safety Plan for the construction works. Art 13 -	Portaria 104/2001- SEC I Clause 8.3 - Safety, health and hygiene at work and SEC II Clause 4.1.2- Planning construction works - 4.1.1- Contractor responsabilities; DL 273/2003: Art 11- Developing the Health & Safety plan for construction works. Art go 12 - Aproval of the Health & Safety Plan for the construction works. Art 13 - Applying the Health & Safety Plan for the construction works. Art 14 - Safety Procedures Record; Art 15 - Prior notice regarding the construction site opening. Art 16 - Project file.	the Health & Safety plan for construction works. Artigo 12 - Aproval of the Health & Safety Plan for the construction works. Art 13 -

	SEC - Section; CAP - Chapter	CLIENT		CONSULTING ENGINEER COMPANY
	DL - Decree-Law; P - Law; DEC - Law; DR - Ruling Decree	PUBLIC AGENCY	CONTRACTOR	DIRECTOR (INSPECTOR OR SUPERVISOR) OF WORKS - CONSULTANT - PROJECT MANAGER
	Green Shade: illustrates the entity involved	PROMOTER - OWNER - DEVELOPER - EMPLOYER	CONSTRUCTION COMPANY	ENGINEER / DESIGNER / CONSULTANT
9	Setting the quality management plan			
:	Preparation of the construction site			
1	Surveying		DL 59/99: Art 24 - Accessory or preliminary work	DL 59/99: Art 24 - Accessory or preliminary work
2 3 4	Jobsite access Grading Jobsite space allocation		coordinator obligations; Art 20 - Contractor obligations; Annex I - Management and organisation of the construction site to be included in the Health & Safety Plan at the design stage. Annex II: Composition of the Heath & Safety plan for the construction works;	DL 273/2003: Art 17 - Promotor/Owner obligations; Art 19 - Safety coordinator obligations; Art 20 - Contractor obligations; Annex I - Management and organisation of the construction site to be included in the Health & Safety Plan at the design stage. Annex II: Composition of the Heatth & Safety plan for the construction works;
5	Temporary facilites		DL 46427: Regulation regarding the temporary instalations for construction workers; P1101/2000: CAP XI Construction - SEC II Construction sites - Art 11.4 to 11.6 and SEC IV Public works - Art 11.8 - 11.17	DL 46427: Regulation regarding the temporary instalations for construction workers; P1101/2000: CAP XI Construction - SEC II Construction sites - Art 11.4 to 11.6 and SEC IV Public works - Art 11.8 - 11.17
6	Jobsite security (temporary fencing, security personnel, signade and barricades, etc.)		DR 33/88: Regulation on construction signalling and ocasional obstacles on public roads; P 1456 A/95: Minimum prescriptions on setting and using Health & Safety signalling at work; DL 141/95: Coordination of the Health & Safety signalling at work: P 101/96: Health & Safety minimum prescriptions in work locations in temporary or mobile construction sites.	DR 33/88: Regulation on construction signalling and ocasional obstacles on public roads; P 1456 A/95: Minimum prescriptions on setting and using Health & Safety signalling at work; DL 141/95: Coordination of the Health & Safety signalling at work; P 101/96: Health & Safety minimum prescriptions in work locations in temporary or mobile construction sites.
7	Other			
•	Development of relevant construction works		DL 59/99: TITLE II - Types of contract jobs [CAP III - Common Dispositions of lump sum contracts and bill of quantity contracts: Art 26 - Performing surplus work; Art 27 - Settling new costs for surplus work; Art 28 - Work suppression; Art 29 - Unused work already carried out; Art 30 - Changes proposed by the contractor].	
ŀ	Control of construction works			
1	Control of resources			
2	Control of deliveries and suppliers			
3	Control of quality (iso 9000)	DL 310/90: LNEC Quality trade-mark; P1101/2000: CAP I - SEC VII Construction Quality: Art 1.16	DL 310/90: LNEC Quality trade-mark; P1101/2000: CAP I - SEC VII Construction Quality: Art 1.16	DL 310/90: LNEC Quality trade-mark; P1101/2000: CAP I - SEC VII Construction Quality: Art 1.16
4	Control of health and safety		DL 273/2003: Art 5 - Health & Safety Planning at work; DL 441/91: General principles for the promotion of Safety, health and hygiene at work; Dec 41821: Work safety regulation for building construction; P 987/93: Health & Safety minimum prescriptions for the work site; P 101/96: Health & Safety minimum prescriptions in work locations in temporary or mobile construction sites; P 104/2001: SEC I Clause 8.3 - Safety, health and hygiene at work and SEC II Clause 4.1.2- Planning construction works; P 1101/2000: CAP XI Construction - SEC I Safety: Art 11.1 and 11.2	DL 273/2003: Art 5 - Health & Safety Planning at work; DL 441/91: General principles for the promotion of Safety, health and hygiene at work; Dec 41821: Work safety regulation for building construction; P 987/93: Health & Safety minimum prescriptions for the work site; P 101/96: Health & Safety minimum prescriptions in work locations in temporary or mobile construction sites; P 104/2001: SEC I Clause 8.3 - Safety, health and hygiene at work and SEC II Clause 4.1.2- Planning construction works; P 1101/2000: CAP XI Construction - SEC I Safety: Art 11.1 and 11.2

SEC - Section; CAP - Chapter	CLIENT		CONSULTING ENGINEER COMPANY
DL - Decree-Law; P - Law; DEC - Law; DR - Ruling Decree	PUBLIC AGENCY	CONTRACTOR	DIRECTOR (INSPECTOR OR SUPERVISOR) OF WORKS - CONSULTANT PROJECT MANAGER
Green Shade: illustrates the entity involved	PROMOTER - OWNER - DEVELOPER - EMPLOYER	CONSTRUCTION COMPANY	ENGINEER / DESIGNER / CONSULTANT
5 Control of environmental issues		DL 76/2002: Regulation on noise emission into the environment by equipment for exterior use ; Law 11/87: Environmental foundation law; P1101/2000: Cap V Environment, natural resources, architectural and archaeological heritage: Art 5.1° to 5.7° and Sec III Noise Polution: Art 11.7; DL 186/90 and DL 278/97: Standards regarding the appraisal of the effects on the environment by certain private and public projects; DR 38/90: Evaluation of the Environmental Impact (AIA) of projects that confirm significante impacts on the environment; DL 69/2000: Law set for the Environmental Impact Valuation of public and private projects susceptible of producing significante efects on the environment.	equipment for exterior use ; Law 11/87: Environmental foundation law; P1101/2000: Cap V Environment, natural resources, architectural and archaeological heritage: Art 5.1° to 5.7° and Sec III Noise Polution: Art 11.7; DL 186/90 and DL 278/97: Standards
6 Control of time			
7 Control of costs / budget		DL 59/99: TITLE II - Types of contract jobs [CAP V: Art 45 - Cost control; Art 46 - Appraisal of cost control measures]	DL 59/99: TITLE II - Types of contract jobs [CAP V: Art 45 - Cost control; Art 46 - Appraisal of cost control measures]
8 Control of changes		DL 59/99: Art 12 - Project variants; Art 30 - Changes proposed by the contractor; Art 45 - Cost control; Art 106 - Changes to the proposal, project or variant.	DL 59/99: Art 12 - Project variants; Art 30 - Changes proposed b the contractor; Art 45 - Cost control; Art 106 - Changes to the proposal, project or variant.
HANDING OVER AND START-UP PHASE			
Closing – out and handing over			
1 Contractor notifies the termination of construction works			
2 Consultant inspects the infrastructure 3 Consultant compiles a list of remaining works (or repairs) to be done			
4 Contractor completes the remaining works or makes the repairs			
5 Engineer issues certificate of substantial completion			
6 Formal handing over of the infrastructure			
7 Taking over of the infrastructure by the client			
8 Economic close-out of the contract between contractor and client (final payment and release of retainage or warranty)			
9 Termination of direction works			
10 Economic close-out of the contract between client and consultant (final			
payment and release of retainage or warranty)			

ANNEX 3: LITHUANIAN PROCEDURES

CC - Civil Code of the Republic of Lithuania,

LC - Law on Construction,

LPP - Law on Public Procurement,

LTP - Law on Territorial Planning,

LI - Law on Investments,

LR - Law on Roads,

LSH - Law on Safety and Healthy at Work

LEP - Law on Evironmental Protection,

LPT - Law on Protected Territories,

LNE - Law on Nuclear Energy,

LAI - Law on the Assessment of an Impact of Planned Economic Activities on the Environment,

LCZ - Law on the Coastal Zone,

STR - Technical Construction Regulations:

STR 1.05.06: 2005 Design of a construction works,

STR 1.08.02:2002 Construction operations,

STR 1.06.03: 2002 Expert examination of a design documentation of a construction works and expert examination of a construction works,

STR 1.09.04: 2002 Supervision of the implementation of a design documentation of a construction works,

STR 1.09.05: 2002 Technical supervision of construction of a construction works,

STR 1.11.01:2002 Acceptance of construction works as fit for use

			DENOMINATION USED IN			
			THESE PROCEDURES	CLIENT	CONTRACTOR	ENGINEER / DESIGNER / CONSULTANT
			OTHER DENOMINATIONS	PROMOTER - OWNER - DEVELOPER - EMPLOYER		DIRECTOR (INSPECTOR OR SUPERVISOR) OF WOKS - CONSULTANT - PROJECT MANAGER
			ORGANIZATION	PUBLIC AGENCY	CONSTRUCTION COMPANY	CONSULTING ENGINEER COMPANY
			CODIFICATION	Р	C	E
CODIFICAT	ΓΙΟΝ					
				LC, art. 3 - The Right to be a Builder (Client) and its Implementation, art. 12 - Duties and Rights of the Builder (Client)		LC, art. 13, 14, 16 - The Right to be an Investigator, a Designer, their Duties and Rights, Duties and Rights of the Technical
1		CONCEPTUAL PHASE				
1		Initiation of the project		LPP, art. 52-54 - Design Contests; art. 96-98 - Simplified Design Contest		LPP, art. 52-54 - Design Contests; art. 96- 98 - Simplified Design Contest
	1	Analysis of needs		LTP, art. 3 - Objectives of Territorial Planning (to form a policy of development of infrastructure systems); LI, art. 12 - State Investment Policy		
	2	Constraints identification		art. 7 - conditions of construction works in the coastal zone; LTP - individual protection regulations of protected territories; LNE, art. 29-34 - Special conditions for the design and	LEP, art. 17 - Construction, Reconstruction and Expansion of Economic Facilities	LEP, art. 16 - Designing Economic Activities which are Likely to Have an Effect on the Environment; LR, art. 10-12 - Road Construction
	3 4 5	Conception of the project Financial assessment Formulation of goals and scope of the		construction of nuclear facilities		
	6	project Analysis of alternatives		LPP, art. 27 - Variants; LAI, art. 7-10 - Assessment of an Impact on the Environment; Supplement 1 - Planned economic activities that need to be selected for an impact on the environment (engineering works among them)		
	7 8	Development of implementation plan Formal acceptance of the project by EU relevant authority				

				DENOMINATION USED IN THESE PROCEDURES	CLIENT	CONTRACTOR	ENGINEER / DESIGNER / CONSULTANT
				OTHER DENOMINATIONS	PROMOTER - OWNER - DEVELOPER - EMPLOYER		DIRECTOR (INSPECTOR OR SUPERVISOR) OF WOKS - CONSULTANT - PROJECT MANAGER
				ORGANIZATION	PUBLIC AGENCY	CONSTRUCTION COMPANY	CONSULTING ENGINEER COMPANY
				CODIFICATION	Р	С	E
CODIF	FICATION	I					
2	1	1	DESIGN PHASE		1		
	1		Organization of the tender for the contract: AEC - architecture / engineering / consulting (design team) or DESIGN-BUILT				
		1	Choosing the form of the contract		LC, art. 12.2 art The builder (client) shall have the right to select a way of organising the design, to select the type of organising the construction		
		2	Running the tender for the contract by the client		LPP, art. 18-35 - Procedure, art. 37-38 art Open Procedure, art. 39-43 art Restricted Procedures, art. 44-51 art Negotiated Procedure; art. 64-77 - Simplified Procurement Procedures, art. 78-81 - Simplified Open Procedure, art. 82-88 - Simplified Restricted Procedure, art. 89-95 - Simplified Negotiated Procedure		LPP, art. 18-35 - Procedure, art. 37-38 art Open Procedure, art. 39-43 art Restricted Procedures, art. 44-51 art Negotiated Procedure; art. 64-77 - Simplified Procurement Procedures, art. 78- 81 - Simplified Open Procedure, art. 82-88 - Simplified Restricted Procedure, art. 89-95 - Simplified Negotiated Procedure
		3	Choosing the relevant company		LC, art. 12.2.3 - The builder (client) shall have the right at his own discretion or by tendering procedure to select designers; LPP, art. 28-32 art requirements for candidates, art. 33-35 - Evaluation and Comparison of Tenders		LPP, art. 28-32 art requirements for candidates, art. 33-35 - Evaluation and Comparison of Tenders
		4	Signing the contract with the relevant company		CC, art. 6.644-6.645 - contract of independent work, art. 6.706 - Content of contract of independent work formed on the basis of a public tender, art. 6.700-6.704 - contract of independent work for fulfilment of projecting and survey work; LPP, art. 15 - Contract		CC, art. 6.644-6.645 - contract of independent work, art. 6.706 - Content of contract of independent work formed on the basis of a public tender, art. 6.700- 6.704 - contract of independent work for fulfilment of projecting and survey work; LPP, art. 15 - Contract

				DENOMINATION USED IN THESE PROCEDURES	CLIENT	CONTRACTOR	ENGINEER / DESIGNER / CONSULTANT
				OTHER DENOMINATIONS	PROMOTER - OWNER - DEVELOPER - EMPLOYER		DIRECTOR (INSPECTOR OR SUPERVISOR) OF WOKS - CONSULTANT - PROJECT MANAGER
				ORGANIZATION	PUBLIC AGENCY	CONSTRUCTION COMPANY	CONSULTING ENGINEER COMPANY
				CODIFICATION	Р	С	E
CODIFIC	ATION						
	2	1	Organization of the design team Appointment of the design team manager		LC, art. 10 - Main Areas of Technical Construction Activities (direction by heads); STR 1.05.06:2005, ch. V.3 - Design of a construction works: designers of the design documentation of a construction works, headship by a head of design of a construction works		LC, art. 10 - Main Areas of Technical Construction Activities (direction by heads); art. 21 - Architectural Decisions of a Design Documentation of a Construction Works. Architect of a Construction Works: the head of design of a construction works;STR 1.05.06:2005, ch. V.3 - Design of a construction works: designers of the design documentation of a construction works, headship by a head of design of a construction works, Supplement 1- Rights and duties of a head of design
		2 3 4	Scope definition Activity planning Resource planning (for the design team)		STR 1.05.06:2005, ch. V.2 - Design of a construction works: steps of designing the construction works		STR 1.05.06:2005, ch. V.2 - Design of a construction works: steps of designing the construction works
		5	Cost estimating		STR 1 . 05 . 06 : 2005, ch. VI - Design of a construction works: composition of a project, art. 37 - estimating the calculating cost, art. 38 - economic part of a project		STR 1 . 05 . 06 : 2005, ch. VI - Design of a construction works: composition of a project, art. 37 - estimating the calculating cost, art. 38 - economic part of a project
		6 7 8	Schedule development (for design) Setting the hierarchic structure of the design project Setting the co-operation structure of the design project				
	3		Development of design		LC, art. 20 - A Design documentation of a construction works. Design Terms; STR 1.05.06:2005, ch. V.2 - Design of a construction works: steps of designing the construction works		LC, art. 20 - A Design documentation of a construction works. Design Terms; STR 1.05.06:2005, ch. V.2 - Design of a construction works: steps of designing the construction works
		1	Surveying		LC, art. 12.2 - Duties and Rights of the Builder (Client): organise construction investigation, art. 19 - Construction Investigations		LC, art. 13 - The Right to be an Investigator. Rights and Duties of the Investigator, art. 19 - Construction Investigations

		DENOMINATION USED IN THESE PROCEDURES	CLIENT	CONTRACTOR	ENGINEER / DESIGNER / CONSULTAN
		OTHER DENOMINATIONS	PROMOTER - OWNER - DEVELOPER - EMPLOYER		DIRECTOR (INSPECTOR OR SUPERVISOR) OF WOKS - CONSULTANT - PROJECT MANAGER
		ORGANIZATION	PUBLIC AGENCY	CONSTRUCTION COMPANY	CONSULTING ENGINEER COMPANY
		CODIFICATION	Р	C	E
DIFICATION					
2	Basic information: urban planning, geology, hidrology, etc.		LC, art. 20 - A Design documentation of a construction works. Design Terms; LTP, art. 13-26 - special and detailed territorial planning		LC, art. 13 - The Right to be an Investigator. Rights and Duties of the Investigator; LTP, art. 13-26 - special and detailed territorial planning
3	Environmental analysis		LC, art. 20 - A Design documentation of a construction works. Design Terms		LC, art. 6 - Protection of the Environment Landscape, of Interests of the Third Parties, art. 13 - Rights and Duties of the Investigator
4	Calculations				STR 1 . 05 . 06 : 2005, ch. VI - Design of construction works: composition of a project, art. 37 - estimating the calculating cost, art. 38 - economic part of a project
5	Drafting				LC, art. 5 - Essential Architectural Requirements for a Construction Works, art. 14 - Duties of the Designer, art. 20 - A Design documentation of a construction works, art. 21 - Architectural Decisions of Design Documentation of a Construction Works; STR 1 . 05 . 06 : 2005, ch. VI - Design of a construction works: composition of a project
6	Technical specifications				STR 1 . 05 . 06 : 2005, ch. VI - Design of construction works: composition of a project
7	Scheduling and resource planning (for construction)				STR 1 . 05 . 06 : 2005, ch. VI - Design of construction works: composition of a project
8	Quality management plan				STR 1 . 05 . 06 : 2005, ch. VI - Design of construction works: composition of a project
9	Health and safety plan				LC, art. 4 - Essential Requirements for a Construction Works; STR 1 . 05 . 06 : 2005, ch. VI - Design of a construction works: composition of a project
10	Budgeting				STR 1 . 05 . 06 : 2005, ch. VI - Design of construction works: composition of a project , art. 38 - economic part of a proje
11	Draft documents - editing, printing and binding				

			DENOMINATION USED IN THESE PROCEDURES	CLIENT	CONTRACTOR	ENGINEER / DESIGNER / CONSULTAN
			OTHER DENOMINATIONS	PROMOTER - OWNER - DEVELOPER - EMPLOYER		DIRECTOR (INSPECTOR OR SUPERVISOR) OF WOKS - CONSULTANT - PROJECT MANAGER
			ORGANIZATION	PUBLIC AGENCY	CONSTRUCTION COMPANY	CONSULTING ENGINEER COMPANY
			CODIFICATION	Р	C	E
ICATIO	N	I				
4		Control of design		LC, art. 12.1.3 - Duties of the Builder (Client): organise expert examination of a design documentation of a construction works, art. 27 - State Supervision of Construction; STR 1 . 06 . 03 : 2002, ch. IV, ch. VI - Expert examination of a design documentation of a construction works and expert examination of a construction works: mandatory expert examination of a design documentation, composition of expert examination ekspertizes sudetis		LC, art. 29 - Expert Examination of a Design Documentation of a Construction Works, art. 27 - State Supervision of Construction; STR 1 . 06 . 03 : 2002, ch. IV, ch. VI - Expert examination of a desig documentation of a construction works ar expert examination of a construction works: mandatory expert examination of a design documentation, composition of expert examination ekspertizes sudetis
5	1 2 3 4 5	Control of resources Control of quality (ISO 9000) Control of time Control of costs Control of changes Approval of the relevant documents by				
Ŭ		the local authority				
6		Closing – out and handing over (of design documents)		STR 1.05.06:2005, ch. VII - Design of a construction works: signing the project, handover of the project to the builder, changing the project		STR 1.05.06:2005, ch. VII - Design of a construction works: signing the project, handover of the project to the builder, changing the project
	1	Inspection by client		CC, art. 6.662 - Acceptance of work fulfilled; LC, art. 12 - Duties and Rights of the Builder (Client)		
	2	Implementation of changes due to inspection by client		CC, art. 6.662 - Acceptance of work fulfilled; LC, art. 12 - Duties and Rights of the Builder (Client)		CC, art. 6.662 - Acceptance of work fulfilled; LC, art. 14 - Duties and Rights of the Designer
	3	Final documents - editing, printing and binding				
	4	Approval by client		CC, art. 6.662 - Acceptance of work fulfilled; STR 1.05.06:2005, ch. VIII - Design of a construction works: Procedure for approval of a project		CC, art. 6.662 - Acceptance of work fulfilled; STR 1.05.06:2005, ch. VIII - Design of a construction works: Procedu for approval of a project

		DENOMINATION USED IN THESE PROCEDURES	CLIENT	CONTRACTOR	ENGINEER / DESIGNER / CONSULTANT
		OTHER DENOMINATIONS	PROMOTER - OWNER - DEVELOPER - EMPLOYER		DIRECTOR (INSPECTOR OR SUPERVISOR) OF WOKS - CONSULTANT - PROJECT MANAGER
		ORGANIZATION	PUBLIC AGENCY	CONSTRUCTION COMPANY	CONSULTING ENGINEER COMPANY
		CODIFICATION	Р	C	E
ICATION					
5	Formal handing over of the design project		CC, art. 6.662 - Acceptance of work fulfilled; LC, art. 12 - Duties and Rights of the Builder (Client); STR 1.05.06:2005, ch. VII - Design of a construction works: handover of the project to the builder		CC, art. 6.662 - Acceptance of work fulfilled; STR 1.05.06:2005, ch. VII - Design of a construction works: handover of the project to the builder
6	Taking over of the design project by the client		CC, art. 6.662 - Acceptance of work fulfilled; LC, art. 12 - Duties and Rights of the Builder (Client); STR 1.05.06:2005, ch. VII - Design of a construction works: handover of the project to the builder		CC, art. 6.662 - Acceptance of work fulfilled; STR 1.05.06:2005, ch. VII - Design of a construction works: handover of the project to the builder
7	Economic close-out of the contract (final payment and release of retainage or warranty)		CC, art. 6.653-6.656 - Price of work, Procedure for payment of work, art. 6.704 - Duties of the customer		CC, art. 6.653-6.656 - Price of work, Procedure for payment of work, art. 6.697 - Guarantee of the quality of work LC, art. 36 - Warranty Period of a Construction Period. Obligations of the Designer, Contractor of a Construction Works and Technical Supervisor of Construction of a Construction Works during a Warranty Period, art. 38 - Compulsory Insurance of Civil Liability of the Designer of a Construction Works

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				DENOMINATION USED IN THESE PROCEDURES	CLIENT	CONTRACTOR	ENGINEER / DESIGNER / CONSULTANT
				OTHER DENOMINATIONS	PROMOTER - OWNER - DEVELOPER - EMPLOYER		DIRECTOR (INSPECTOR OR SUPERVISOR) OF WOKS - CONSULTANT - PROJECT MANAGER
				ORGANIZATION	PUBLIC AGENCY	CONSTRUCTION COMPANY	CONSULTING ENGINEER COMPANY
				CODIFICATION	Р	С	E
CODIF					1		
3			PRE-CONSTRUCTION PHASE				
	1	1	Organisation of the tender for engineer (consulting engineering company) Running the tender for engineer (consulting engineering company) by the client		LPP, art. 18-35 - Procedure, art. 37-38 art Open Procedure, art. 39-43 art Restricted Procedures, art. 44-51 art Negotiated Procedure; art. 64-77 - Simplified Procurement Procedures, art. 78-81 - Simplified Open Procedure, art. 82-88 - Simplified Restricted Procedure, art. 89-95 - Simplified Negotiated Procedure		LPP, art. 18-35 - Procedure, art. 37-38 art Open Procedure, art. 39-43 art Restricted Procedures, art. 44-51 art Negotiated Procedure; art. 64-77 - Simplified Procurement Procedures, art. 78- 81 - Simplified Open Procedure, art. 82-88 - Simplified Restricted Procedure, art. 89-95 - Simplified Negotiated Procedure
		2	Choosing the engineer (consulting engineering company)		LPP, art. 28-32 art requirements for candidates, art. 33-35 - Evaluation and Comparison of Tenders		LPP, art. 28-32 art requirements for candidates, art. 33-35 - Evaluation and Comparison of Tenders
		3	Signing the contract with the consulting engineering company		LPP, art. 15 - Contract		LPP, art. 15 - Contract
	2		Organisation of the tender for contractor (construction company) (if the DESIGN-BUILT contract was NOT chosen in point 2.1)		Negotiated Procedure; art. 64-77 - Simplified Procurement Procedures,	LPP, art. 18-35 - Procedure, art. 37-38 art Open Procedure, art. 39-43 art Restricted Procedures, art. 44-51 art Negotiated Procedure; art. 64-77 - Simplified Procurement Procedures, art. 78-81 - Simplified Open Procedure, art. 82-88 - Simplified Restricted Procedure, art. 89-95 - Simplified Negotiated Procedure	

		DENOMINATION USED IN THESE PROCEDURES	CLIENT	CONTRACTOR	ENGINEER / DESIGNER / CONSULTANT
		OTHER DENOMINATIONS	PROMOTER - OWNER - DEVELOPER - EMPLOYER		DIRECTOR (INSPECTOR OR SUPERVISOR) OF WOKS - CONSULTANT - PROJECT MANAGER
		ORGANIZATION	PUBLIC AGENCY	CONSTRUCTION COMPANY	CONSULTING ENGINEER COMPANY
		CODIFICATION	Р	С	E
CODIFICATION					
	Choosing the tender method for constractor		LC, art. 12.2 art The builder (client) shall have the right to select a way of organising the design, to select the type of organising the construction; STR 1.08.02:2002, ch. IV - Construction Operations: types of construction works		
2	Running the tender for contractor		Restricted Procedures, art. 44-51 art Negotiated Procedure; art. 64-77 - Simplified Procurement Procedures, art. 78-81 - Simplified Open Procedure, art. 82-88 - Simplified Restricted	LPP, art. 18-35 - Procedure, art. 37-38 art Open Procedure, art. 39-43 art Restricted Procedures, art. 44-51 art Negotiated Procedure; art. 64-77 - Simplified Procurement Procedures, art. 78-81 - Simplified Open Procedure, art. 82-88 - Simplified Restricted Procedure, art. 89-95 - Simplified Negotiated Procedure	
3	Choosing the contractor		LC, art. 12.2.3 - The builder (client) shall have the right at his own discretion or by tendering procedure to select; LPP, art. 28-32 art requirements for candidates, art. 33-35 - Evaluation and Comparison of Tenders	LPP, art. 28-32 art requirements for candidates, art. 33-35 - Evaluation and Comparison of Tenders	
4	Signing the contract with the construction company		CC, art. 6.644-6.645 - contract of independent work, art. 6.681-6.699 - a contract of construction independent work, art. 6.706 - Content of contract of independent work formed on the basis of a public tender; LPP, art. 15 - Contract	CC, art. 6.644-6.645 - contract of independent work, art. 6.681-6.699 - a contract of construction independent work, art. 6.706 - Content of contract of independent work formed on the basis of a public tender; LPP, art. 15 - Contract	

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				DENOMINATION USED IN THESE PROCEDURES	CLIENT	CONTRACTOR	ENGINEER / DESIGNER / CONSULTANT
				OTHER DENOMINATIONS	PROMOTER - OWNER - DEVELOPER - EMPLOYER		DIRECTOR (INSPECTOR OR SUPERVISOR) OF WOKS - CONSULTANT - PROJECT MANAGER
				ORGANIZATION	PUBLIC AGENCY	CONSTRUCTION COMPANY	CONSULTING ENGINEER COMPANY
				CODIFICATION	Р	С	E
CODI	FICATION	1					
соы	FICATION						
4			CONSTRUCTION PHASE				
	1		Organization of the construction works				
		1	Appointment of the construction team manager		STR 1.08.02:2002, ch. IX - Construction operations: headship for construction works	LC, art. 15.5 - Duties of the Contractor; STR 1.08.02:2002, ch. IX - Construction operations: headship for construction works , ch. XII-XV - heads of construction works, their rights and duties	
		2	Appointment of the other key persons of the construction team		STR 1.08.02:2002, ch. IX - Construction operations: headship for construction works	STR 1.08.02:2002, ch. IX - Construction operations: headship for construction works , ch. XII-XV - heads of construction works, their rights and duties	
		3	Planning the cost		CC, art. 6.684 - estimates	CC, art. 6.684 - estimates	
		4	Creation of the schedule for the construction works		CC, art. 6.652 - Time-limits for the fulfilment of work	CC, art. 6.652 - Time-limits for the fulfilment of work	
		5	Task division between contractors			CC, art. 6.650 - General independent work contractor and subcontractor	
		6	Choosing the suppliers and subcontractors		LPP, art. 28-32 art requirements for candidates, art. 33-35 - Evaluation and Comparison of Tenders	CC, art. 6.650 - General independent work contractor and subcontractor; LPP, art. 28-32 art requirements for candidates, art. 33-35 - Evaluation and Comparison of Tenders	
		7	Contracting the goods and services		CC, art. 6.647-6.648 - Fulfilment of work from the materials and by the means of the independent work contractor, Fulfilment of work from the materials of the customer, 6.686 art Provision of construction with materials and equipment	CC, art. 6.647-6.648 - Fulfilment of work from the materials and by the means of the independent work contractor, Fulfilment of work from the materials of the customer, 6.686 art Provision of construction with materials and equipment	

				DENOMINATION USED IN THESE PROCEDURES	CLIENT	CONTRACTOR	ENGINEER / DESIGNER / CONSULTANT
				OTHER DENOMINATIONS	PROMOTER - OWNER - DEVELOPER - EMPLOYER		DIRECTOR (INSPECTOR OR SUPERVISOR) OF WOKS - CONSULTANT - PROJECT MANAGER
				ORGANIZATION	PUBLIC AGENCY	CONSTRUCTION COMPANY	CONSULTING ENGINEER COMPANY
				CODIFICATION	Р	С	E
CODIFI	CATION						
		8	Setting the health and safety plan			CC, art. 6.692 - protection of environment and ensuring safety of work; LC, art. 15.5.5 - Duties of the Contractor: ensure conditions on the construction plot and at a construction works under construction	
		9	Setting the quality management plan				
	2		Preparation of the construction site			STR 1.08.02:2002, ch. VII - Construction operations: steps of construction works	
		1	Surveying			LC, art. 19 art Construction Investigations, art. 6 - Protection of the Environment, Landscape and other	
		2	Jobsite access			Types of Properties STR 1.08.02:2002, ch. VII - Construction operations: steps of construction works	
		3	Grading			STR 1.08.02:2002, ch. VII - Construction operations: steps of construction works	
		4	Jobsite space allocation			STR 1.08.02:2002, ch. VII - Construction operations: steps of construction works	
		5	Temporary facilites			STR 1.08.02:2002, ch. VII - Construction operations: steps of construction works	
		6	Jobsite security (temporary fencing, security personnel, signade and barricades, etc.)			CC, art. 6.692 - protection of environment and ensuring safety of work; LC, art. 15.5.5 - Duties aof the Contractor: ensure conditions on the construction plot and at a construction works under construction	
		7	Other				
	3		Development of relevant construction works			STR 1.08.02:2002, ch. VII - Construction operations: steps of construction works	
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			DENOMINATION USED IN THESE PROCEDURES	CLIENT	CONTRACTOR	ENGINEER / DESIGNER / CONSULTANT
			OTHER DENOMINATIONS	PROMOTER - OWNER - DEVELOPER - EMPLOYER		DIRECTOR (INSPECTOR OR SUPERVISOR) OF WOKS - CONSULTANT - PROJECT MANAGER
			ORGANIZATION	PUBLIC AGENCY	CONSTRUCTION COMPANY	CONSULTING ENGINEER COMPANY
			CODIFICATION	Р	С	E
CODIFICATIO	N					
4		Control of construction works		CC, art. 6.689 - Right of the customer to control and supervise construction work; LC, art. 12.1.5 - Duties of the Builder (Client): organise and carry out technical supervision of the construction, art. 27 - State Supervision of Construction, art. 31 art Supervision of the Implementation of a Design documentation of a construction works; STR 1 . 09 . 04 : 2002 Supervision of the implementation of a design documentation of a construction works, STR 1 . 09 . 05 : 2002 Technical supervision of construction of a construction works; STR 1 . 08 . 02 : 2002 Construction operations: supervision of construction works		CC, art. 6.690 art Participation of the projecting institutions; LC, str. 14 - Duties and Rights of the Designer: by builder's (client's) order and under the contract carry out supervision of the implementation of a design documentation of a construction works; art. 16 - Duties and Rights of the Technical Supervisor of Construction of a Construction Works, art. 27 art State Supervision of Construction, art. 30 - Technical Supervision of Construction, art. 31 - Supervision of the Implementation of a Design documentation of a construction works ; STR 1 . 09 . 04 : 2002 Supervision of the implementation of a design documentation of a construction works, STR 1 . 09 . 05 : 2002 Technical supervision of construction of a construction works; STR 1 . 08 . 02 : 2002 Construction operations: supervision of construction works
	1	Control of resources Control of deliveries and suppliers		CC, art. 6.689 - Right of the customer to control and supervise construction work	LC, art. 18 art Rights and Duties of	LC, art. 16.2, 16.3 - Duties and Rights of the Technical Supervisor of Construction of a Construction Works
	3	Control of quality (iso 9000)			Suppliers of Construction Products	LC, art. 16.2, 16.3 - Duties and Rights of
	4	Control of health and safety			LC, art. 4 - Essential Requirements for a Construction Works	the Technical Supervisor of Construction of a Construction Works LC, art. 4 - Essential Requirements for a Construction Works, art. 16.2, 16.3 - Duties and Rights of the Technical Supervisor of Construction of a Construction Works
	5	Control of environmental issues			LC, art. 6 - Protection of the Environment, Landscape and other Types of Properties	LC, art. 6 - Protection of the Environment, Landscape and other Types of Properties

				DENOMINATION USED IN THESE PROCEDURES	CLIENT	CONTRACTOR	ENGINEER / DESIGNER / CONSULTANT
				OTHER DENOMINATIONS	PROMOTER - OWNER - DEVELOPER - EMPLOYER		DIRECTOR (INSPECTOR OR SUPERVISOR) OF WOKS - CONSULTANT - PROJECT MANAGER
				ORGANIZATION	PUBLIC AGENCY	CONSTRUCTION COMPANY	CONSULTING ENGINEER COMPANY
				CODIFICATION	Р	С	E
CODI	FICATION	N					
		6	Control of time		CC, art. 6.652 - Time-limits for the fulfilment of work, art. 6.689 - Right of the customer to control and supervise construction work	CC, art. 6.652 - Time-limits for the fulfilment of work	
		7 8	Control of costs / budget Control of changes				
5			HANDING OVER AND START-UP PHASE				
	1	1	Closing – out and handing over Contractor notifies the termination of construction works			CC, art. 6.662 - Acceptance of work fulfilled, art. 6.694 - Handing over and acceptance of work	
		2	Consultant inspects the infrastructure		LC, art. 17 - Duties and Rights of the Manager of Design of a Construction Works and the Manager of construction of a construction works		LC, art. 16 - Duties and Rights of the Technical Supervisor of Construction of a Construction Works, 17 art sart. 17 - Duties and Rights of the Manager of Design of a Construction Works and the Manager of construction of a construction works
		3	Consultant compiles a list of remaining works (or repairs) to be done			LC, art. 16.3 - The demand of the technical supervisor of construction of a construction works to correct any violations	LC, art. 16.3 - The demand of the technical supervisor of construction of a construction works to correct any violations
		4	Contractor completes the remaing works or makes the repairs		CC, art. 6.699 - Elimination of defects	CC, art. 6.699 - Elimination of defects; LC, art. 16.3 - Requirements of the technical supervisor of construction of a construction works to correct any violations; art. 16.4 - if the contractor fails to meet the requirements	
		5	Engineer issues certificate of substantial completion				

			DENOMINATION USED IN THESE PROCEDURES	CLIENT	CONTRACTOR	ENGINEER / DESIGNER / CONSULTANT
			OTHER DENOMINATIONS	PROMOTER - OWNER - DEVELOPER - EMPLOYER		DIRECTOR (INSPECTOR OR SUPERVISOR) OF WOKS - CONSULTANT - PROJECT MANAGER
			ORGANIZATION	PUBLIC AGENCY	CONSTRUCTION COMPANY	CONSULTING ENGINEER COMPANY
			CODIFICATION	Р	С	E
CODIFICATIO	DN					
	6	Formal handing over of the infrastructure		CC, art. 6.662 - Acceptance of work fulfilled, art. 6.694 - Handing over and acceptance of work; LC, art. 24 - Accepting a Construction Works as Fit for Use; LEP, art. 18 - Commissioning of Newly-built, Reconstructed and Expanded Economic Facilities	CC, art. 6.662 - Acceptance of work fulfilled, art. 6.694 - Handing over and acceptance of work; LC, art. 15 - Duties and Rights of the Contractor: participate in acceptance of a construction works as fit for use; LEP, art. 18 - Commissioning of Newly-built, Reconstructed and Expanded Economic Facilities	LC, art. 14 - Duties and Rights of the Designer: participate in acceptance of a construction works as fit for use, art. 16 - Duties and Rights of the Technical Supervisor of Construction of a Construction Works: jointly with the contractor prepare documents for accepting the construction works as fit for use and participate during the acceptance of the construction works as fit for use
	7	Taking over of the infrastructure by the client		CC, art. 6.662 - Acceptance of work fulfilled, art. 6.694 - Handing over and acceptance of work	CC, art. 6.662 - Acceptance of work fulfilled, art. 6.694 - Handing over and acceptance of work; LC, art. 15 - Duties and Rights of the Contractor: participate in acceptance of a construction works as fit for use	
	8	Economic close-out of the contract between client and contractor, or when apply – client represented by consultant (final payment and release of retainage or warranty)		CC, art. 6.653-6.656 - Price of work, Procedure for payment of work, art. 6.664-6.667 - Guarantee of the quality of work; art. 6.687 - Payment for work	CC, art. 6.653-6.656 - Price of work, Procedure for payment of work, art. 6.664-6.667 - Guarantee of the quality of work; art. 6.687 - Payment for work, art. 6.697 - Guarantee of the quality of work, art. 6.703-6.704 - Liability of the independent work contractor and Duties of the customer; LC, art. 36 - Warranty Period of a Construction Period: Obligations of the Contractor, art. 39 - Compulsory Insurance of Civil Liability of the Contractor	
	9 10	Termination of direction works Economic close-out of the contract between client and consultant (final payment and release of retainage or warranty)		CC, art. 6.653-6.656 - Price of work, Procedure for payment of work, 6.704 - Duties of the customer		CC, art. 6.653-6.656 - Price of work, Procedure for payment of work, art. 6.697 art Guarantee of the quality of work; LC, art. 36 - Warranty Period of a Construction Period: Obligations of the Designer and Technical Supervisor of Construction of a Construction Works during a Warranty Period

	DENOMINATION USED IN THESE PROCEDURES	CLIENT	CONTRACTOR	ENGINEER / DESIGNER / CONSULTANT
	OTHER DENOMINATIONS	PROMOTER - OWNER - DEVELOPER - EMPLOYER		DIRECTOR (INSPECTOR OR SUPERVISOR) OF WOKS - CONSULTANT - PROJECT MANAGER
	ORGANIZATION	PUBLIC AGENCY	CONSTRUCTION COMPANY	CONSULTING ENGINEER COMPANY
	CODIFICATION	Р	С	E
2 Start-up of the infrastructure operations			STR 1.11.01:2002 Acceptance of construction works as fit for use	LC, art. 41 and 42 - technical supervision of the construction and supervision of use; STR 1.11.01:2002 Acceptance of construction works as fit for use

ANNEX 4: SPANISH PROCEDURES
The **normative** considered have been divided in several **groups**:

- a) Procedures for tendering and contracting (in BLUE):
 - LAP: Contract Law for Public Agencies (2/2000)
 - RAP: Regulation of the Contract Law for Public Agencies (1098/2001)
- b) **Procedures for safety and health in construction (**a general Law, appliable to every industry, a Regulation that developes it, and a specific Regulation for the construction industry, in **RED**):
 - LPR: Occupational Risks Prevention Law (31/1995)
 - RPR: Regulation of the Occupational Risks Prevention Law (39/1997)
 - DMS: Regulation of Occupational Risks Prevention in Construction Works (1627/1997)
- c) **Procedures for environmental impact assessment** (the Law and Regulation of the Central Administration in **GREEN**, regional governments' laws and regulations are not considered):
 - LIA: Environmental Impact Assessment Law (1302/1986 & 6/2001)
 - RIA: Regulation of the Environmental Impacto Assessment Law (1131/1988)
- d) **Procedures for civil engineering and building infrastructures** (several laws and regulations in **BLACK**):
 - LCR: Roads Law (25/1988)
 - LAG: Water Management Law (1/2001)
 - LCS: Seashore Law (22/1988)
 - LPT: Harbours Law (62/1997)
 - LTT: Transportation Law (16/1987)
 - LFC: Railways Law (39/2003)
 - LOE: Building Law (38/1999)
- e) Procedures of the European Union (used as general reference in tendering and contracting and safety and health, in ORANGE): EU018: Directive on the coordination of procedures for the award of public works contracts, public supply contracts and public service contracts (2004/18/EC)
 - EU391: Directive on the introduction of measures to encourage improvements in the safety and health of workers at work (1989/391 CEE)
 - EU383: Directive supplementing the measures to encourage improvements in the safety and health at work of workers with a fixed- duration employment relationship or a temporary EU057: Directive on the implementation of minimum safety and health requirements at temporary or mobile construction sites (1992/57 CEE)
 - EU085: Directive on the introduction of measures to encourage improvements in the safety and health at work of pregnant workers and workers who have recently given birth or are EU033: Directive on the protection of young people at work (1994/33 CEE)

CLIENT	CONTRACTOR	CONSULTANT
PROMOTER - OWNER - DEVELOPER -		ENGINEER / DESIGNER / DIRECTOR
EMPLOYER		(INSPECTOR OR SUPERVISOR) OF
		WORKS - PROJECT MANAGER
PUBLIC AGENCY	CONSTRUCTION COMPANY	CONSULTING ENGINEERING &
		ARCHITECTURAL (CEA) COMPANY
Р	C	E

		CONCEPTUAL PHASE	
1		Initiation of the project	
	1	Analysis of needs	LCR, art.5_Roads planning; LAG, art.40- 46_Water management planning; LPT, art.18_Harbour system planning; LTT, art.15- 16_Transportation planning; LFC, art.5.1_Railways planning
	2	Constraints identification	
	3	Conception of the project	
	4	Financial assessment	LAP, art.227_Feasibility analysis; LCR, art.13_Financing; LCS, art.82-83_Financing
	5	Formulation of goals and scope of the project	RAP, art.121-123_Preliminary design project and basic design project; LCS, art.42.1_Coastal engineering basic design project; LFC, art.5.2- 5.6_Railways preliminary design project
	6	Analysis of alternatives	RAP, art.121-123_Preliminary design project and basic design project; LCS, art.42.1_Coastal engineering basic design project; LFC, art.5.2- 5.6_Railways preliminary design project
	7	Development of implementation plan	RAP, art.122_Basic design project; LIA, art.1_Environmental impact assessment; RIA, art.5-6_Environmental impact assessment; LFC, art.7.1,2&3_Urban planning and railway infrastructures
	8	Formal acceptance of the project by EU relevant authority	LIA, art.6_Environmental impact assessment affecting several countries; RIA, art.23- 24_Environmental impact assessment with transboundary effects

CLIENT	CONTRACTOR	CONSULTANT
PROMOTER - OWNER - DEVELOPER -		ENGINEER / DESIGNER / DIRECTOR
EMPLOYER		(INSPECTOR OR SUPERVISOR) OF
		WORKS - PROJECT MANAGER
PUBLIC AGENCY	CONSTRUCTION COMPANY	CONSULTING ENGINEERING &
		ARCHITECTURAL (CEA) COMPANY
Р	C	E

	DESIGN PHASE		
1	Organization of the tender for the contract: DESIGN (CEA company) or DESIGN-BUILT (construction company)		
1	Choosing the form of the contract	LAP, art.13_Contrat purpose; LAP, art.14_Contract price; RAP, art.197_Prices; LAP, art.15-16_Conditions for contracting; RAP, art.9- 14_Conditions for contracting; LAP, art.202_Reasons for contracting; LAP, art.67- 69_Preparatory actions for contracting; RAP, art.73_Preparatory actions for contracting; LAP, art.48-52_Administrative and technical specifications; RAP, art.66-70_Administrative and technical specifications; LAP, art.70- 72_Documentation procedures; LAP, art.73-75, 207-208_Contract procedures;	LAP, art. 196_Consulting services contract; LAP, art 122_Design project; LOE, art.4_Design project for buildings

Choosing the form of the contract	LAP, art.13_Contrat purpose; LAP,	LAP, art. 120_Public works contract; LAP, art.	LAP, art. 196_Consulting services cont
	art.14_Contract price; RAP, art.197_Prices; LAP, art.15-16_Conditions for contracting; RAP, art.9-	125_Design-build; LAP, art. 122_Design project	122_Design project; LOE, art.4_Design buildings
	14_Conditions for contracting; LAP,		, in the second s
	art.202_Reasons for contracting; LAP, art.67-		
	69_Preparatory actions for contracting; RAP,		
	art.73_Preparatory actions for contracting; LAP,		
	art.48-52_Administrative and technical		
	specifications; RAP, art.66-70_Administrative and		
	technical specifications; LAP, art.70-		
	72_Documentation procedures; LAP, art.73-75,		
	207-208_Contract procedures;		
	LAP, art.91_Restricted procedure; RAP, art.91-		
	92_Restricted procedure; LAP, art.		
	92_Competitive dialogue and negotiated		
	procedures; RAP, art.91-93_Competitive dialogue		
	and negotiated procedures; LAP, art.76-		
	77_Proceedings; LAP, art.198_Contract duration,		
	RAP, art.91-92_Contract duration; LAP,		
	art.201_Invoice as contract; LAP, art.208-		
	210_Contract procedures; LAP,		
	art.197_Conditions for participation; RAP,		
	art.19_Conditions for participation; EU018,		
	art.1_Definitions related to public contracts; EU018, art.23 Technical specifications; EU018,		
	art.28-31 Contract procedures		
	alt.20-51_Contract procedules		
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CLIENT	CONTRACTOR	CONSULTANT
PROMOTER - OWNER - DEVELOPER -		ENGINEER / DESIGNER / DIRECTOR
EMPLOYER		(INSPECTOR OR SUPERVISOR) OF
		WORKS - PROJECT MANAGER
PUBLIC AGENCY	CONSTRUCTION COMPANY	CONSULTING ENGINEERING &
		ARCHITECTURAL (CEA) COMPANY
Р	C	E

		2	Running the tender for the contract by the client	LAP, art. 79-80_Receipts of tenders; RAP, art.80- 85_Receipts of tenders; LAP, art.35_Provisional warranty; LAP, art. 41-46_Warranties; RAP, art.55-64_Warranties; EU018, art.35- 36_Publication of notices; EU018, art.38_Time limits for receipts; EU018, art.40_Invitation to submit tenders	LAP, art. 79-80_Receipts of tenders; RAP, art.80- 85_Receipts of tenders; LAP, art.35_Provisional warranty; LAP, art. 41-46_Warranties; RAP, art.55- 64_Warranties; EU018, art.38_Time limits for receipts; EU018, art.40_Invitation to submit tenders
2	1	3	Choosing the relevant company	LAP, art.78, RAP, art.74-78_Publicity; LAP, art.81_Contracting board, RAP art.79_Contracting board; LAP, art.82- 84_Awarding for lowest price; RAP art.85- 87_Awarding for lowest price; LAP, art.85- 90_Awarding for multiple criteria; RAP, art.88- 90_Awarding for multiple criteria; LAP, art.91_Restricted procedure; RAP, art.91- 92_Restricted procedure; LAP, art.92_Competitive dialogue and negotiated procedures, RAP, art.91-93_Competitive dialogue and negotiated procedures; EU018, art.28- 31_Contract procedures; EU018, art.41_Informing tenderes; EU018, art.42_Communication; EU018, art.43_Reports; EU018, art.44_Verification of suitability of participants; EU018, art.45-50_Criteria for qualitative selection; EU018, art.55_Abnormally low tenders	
		4	Signing the contract with the relevant company	LAP, art.93_Notification of contract award; LAP, art.53-58_Signing the contract; LAP, art.36,37,41- 47_Final warranty, RAP, art.55-65_Warranties; LAP, art.94-102_Performance and modification of contracts	LAP, art.53-58_Signing the contract; LAP, art.36- 47_Final warranty; RAP, art.55-65_Final warranty; LAP, art.211-212_Performance and modification of contracts; RAP, art.198-202_Performance and modification of contracts

Р	С	E
		ARCHITECTURAL (CEA) COMPANY
PUBLIC AGENCY	CONSTRUCTION COMPANY	CONSULTING ENGINEERING &
		WORKS - PROJECT MANAGER
EMPLOYER		(INSPECTOR OR SUPERVISOR) OF
PROMOTER - OWNER - DEVELOPER -		ENGINEER / DESIGNER / DIRECTOR
CLIENT	CONTRACTOR	CONSULTANT

2	2		Organization of the design team		
		1	Appointment of the design team manager	DMS, art.2.1.d)_Appointment of design team manager; DMS, art.3.1_Appointment of coordinator for safety and health; LOE, art.9_Promoter; EU057, art.3.1_Appointment of coordinator for safety and health	LAP, art.19_Technical team; DMS, art.2.1.d)_Appointment of design team manager; DMS, art.3.1_Appointment of coordinator for safety and health matters; LOE, art.10_Designer; EU057, art.3.1_Appointment of coordinator for safety and health
		2	Scope definition		LAP, art.124_Design project contents; RAP, art.124- 133_Design project contents; LIA, art.2_Environmental impact assessment contents; RIA, art.7-12_Environmental impact assessment contents; LCR, art.7_Roads design project; LCR, art.8.3_Contents of a roads design project; LCS, art.42.4_Economic studies for coastal engineering projects; LCS, art.43-44_Coastal engineering design project; LTT, art.152_Railways design project; LFC, art.6_Railways basic design project and design project; LOE, art.4_Buildings design project
2	2	3 4 5 6 7 8	Activity planning Resource planning (for the design team) Cost estimating Schedule development (for design) Setting the hierarchic structure of the design project Setting the co-operation structure of the design project		

CLIENT	CONTRACTOR	CONSULTANT
PROMOTER - OWNER - DEVELOPER -		ENGINEER / DESIGNER / DIRECTOR
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PUBLIC AGENCY	CONSTRUCTION COMPANY	CONSULTING ENGINEERING &
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Р	C	E

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2	3		Development of design		
		1	Surveying		
		2	Basic information: urban planning, geology,		
			hidrology, etc.		
		3	Environmental analysis		
		4	Calculations		
		5	Drafting		
		6	Technical specifications		LAP, art.127_Technical specifications; LOE, art.3_Technical specifications for buildings
		7	Scheduling and resource planning (for construction)		
		8	Quality management plan		RAP, art.145_Testing of materials and work units
		9	Health and safety plan	DMS, art.4_Obligatory nature of the study of safety and health; DMS, art.5.1&6.1_ Elaboration of a study of safety and health	DMS, art.4_Obligatory nature of the study of safety and health; DMS; art.5.1&6.1_Elaboration of a study of safety and health; DMS, art.5.2&6.2_ Elaboration and contents of a study of safety and health
		10 11	Budgeting Draft documents - editing, printing and binding		
2	4		Control of design		
		1	Control of resources		
		2	Control of quality (ISO 9000)		
		3	Control of time	RAP, art.198_Work schedule	RAP, art.198_Work schedule
		4	Control of costs	RAP, art.199-201_Budgeting	RAP, art.199-201_Budgeting
		5	Control of changes	RAP, art.202_New prices	RAP, art.202_New prices
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CLIENT	CONTRACTOR	CONSULTANT
PROMOTER - OWNER - DEVELOPER -		ENGINEER / DESIGNER / DIRECTOR
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		WORKS - PROJECT MANAGER
PUBLIC AGENCY	CONSTRUCTION COMPANY	CONSULTING ENGINEERING &
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P	C	E

2	5	Approval of the relevant decuments by	LIA, art.3-4 Procedure for environmental impact	1
2	S	Approval of the relevant documents by authorities affected	assessment; RIA, art.13-22_Procedure for	
		authorities affected		
			environmental impact assessment; LCR,	
			art.6_Report on compilance of roads design	
			projects; LCR, art.9_Procedure for environmental	
			impact assessment; LCR, art 10.1_Compilance of	
			regional governments and local agencies; LCR,	
			art.10.2_Initial approval; LCR, art.10.4_Public	
			exposition of design project; LCR,	
			art.11_Expropriations; LAG, art.100-	
			102,106&108bis_Requirement for landfill	
			activities; LAG, art.129_Procedure for	
			environmental impact assessment;	
			LPT, art.19_Construction works in public domain	
			(harbours); LPT, art.20.2&21.1_Procedure for	
			environmental impact assessment; LPT,	
			art.21.2_Requirements for dredging works; LCS,	
			art.42.3&45_Public exposition of design project;	
			LCS,art,51-52&55_Licences for activities in	
			seashore domain; LCS, art.63_Requirements for	
			dredging; LFC, art.7.3_Expropriations; LFC,	
			art.7.4&5_Licences for activities in railways	
			domain; LOE, art.5_Licences for activities in	
			building	
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2	6	Closing – out and handing over (of		
		design documents)		
		1 Inspection by client	LAP, art.128_Inspection of design project; RAP,	
			art.135-137_Inspection of design project	
		2 Implementation of changes due to		LAP, art.217-219_Making up for deficiencies and
1		inspection by client		responsabilities; RAP, art.203_Handing over of
				design documents
1		3 Final documents - editing, printing and		RAP, art.203_Handing over of design documents
		binding		
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CLIENT	CONTRACTOR	CONSULTANT
PROMOTER - OWNER - DEVELOPER -		ENGINEER / DESIGNER / DIRECTOR
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		WORKS - PROJECT MANAGER
PUBLIC AGENCY	CONSTRUCTION COMPANY	CONSULTING ENGINEERING &
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P	C	E

		4	Approval by client	RAP, art.134_Approval of design project; LCR, art.8.1_Approval of roads design project; LAG, art.130_Approval of hidraulic works design project; LPT, art.20.1,21.1&22.1_Approval of harbour design project; LCS, art.45.2&3_Approval of coastal engineering design project; LTT, art.152_Approval of railways design project; LFC, art.6.2,8.4,&9.2_Approval of railways design project	
2	6	5	Formal handing over of the design project	LAP, art.110_Formal receiving of design project; RAP, art.204_Formal receiving of design project; LAP, art.213_Contract fulfilment	LAP, art.110_Formal receiving of design project; RAP, art.204_Formal receiving of design project; LAP, art.213_Contract fulfilment
		6	Taking over of the design project by the client		
		7	Economic close-out of the contract (final payment and release of retainage or warranty)	LAP, art.110.4_Economic close-out of the contract; LAP, art.109_End of contract; LAP, art.129_Geometric verification of design project	LAP, art.110.4_Economic close-out of the contract; LAP, art.109_End of contract; LAP, art.129_Geometric verification of design project

CLIENT	CONTRACTOR	CONSULTANT
PROMOTER - OWNER - DEVELOPER ·		ENGINEER / DESIGNER / DIRECTOR
EMPLOYER		(INSPECTOR OR SUPERVISOR) OF
		WORKS - PROJECT MANAGER
PUBLIC AGENCY	CONSTRUCTION COMPANY	CONSULTING ENGINEERING &
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Р	C	E

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3			PRE-CONSTRUCTION PHASE		
3	1		Organisation of the tender for consultant (CEA company)		
		1	Running the tender for consultant by the	LAP, art.13_Contrat purpose; LAP,	LAP, art. 196_Consulting services contract; LAP, art.
		1.	client	art.14_Contract price; RAP, art.197_Prices; LAP,	122_Design project; LAP, art. 79-80_Receipts of
				art.15-16_Conditions for contracting; RAP, art.9-	tenders; RAP, art.80-85_Receipts of tenders; LAP,
				14_Conditions for contracting; LAP,	art.35_Provisional warranty; LAP, art. 41-
				art.202_Reasons for contracting; LAP, art.67-	46_Warranties; RAP, art.55-64_Warranties; LOE,
				69_Preparatory actions for contracting; RAP,	art.4_Design project for buildings; EU018,
				art.73_Preparatory actions for contracting; LAP,	art.38_Time limits for receipts; EU018,
				art.48-52_Administrative and technical	art.40_Invitation to submit tenders
				specifications; RAP, art.66-70_Administrative and	
				technical specifications; LAP, art.70-	
				72_Documentation procedures; LAP, art.73-75,	
				207-208_Contract procedures; LAP,	
				art.91_Restricted procedure; RAP, art.91-	
				92_Restricted procedure; LAP, art.	
				92_Competitive dialogue and negotiated	
				procedures; RAP, art.91-93_Competitive dialogue	
				and negotiated procedures; LAP, art.76-	
				77_Proceedings;	
				LAP, art.198_Contract duration, RAP, art.91-	
				92_Contract duration; LAP, art.201_Invoice as	
				contract; LAP, art.208-210_Contract procedures;	
				LAP, art.197_Conditions for participation; RAP,	
				art.19_Conditions for participation; LAP, art. 79-	
				80_Receipts of tenders; RAP, art.80-85_Receipts	
				of tenders;	
				LAP, art.35_Provisional warranty; LAP, art. 41-	
				46_Warranties; RAP, art.55-64_Warranties;	
				EU018, art.1_Definitions related to public	
				contracts; EU018, art.23_Technical	
				specifications; EU018, art.28-31_Contract	
1				procedures; EU018, art.35-36_Publication of	
				notices; EU018, art.38_Time limits for receipts;	
				EU018, art.40_Invitation to submit tenders	
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CLIENT	CONTRACTOR	CONSULTANT
PROMOTER - OWNER - DEVELOPER -		ENGINEER / DESIGNER / DIRECTOR
EMPLOYER		(INSPECTOR OR SUPERVISOR) OF
		WORKS - PROJECT MANAGER
PUBLIC AGENCY	CONSTRUCTION COMPANY	CONSULTING ENGINEERING &
		ARCHITECTURAL (CEA) COMPANY
Р	C	E

3	1	2	Choosing the consultant	LAP, art.78, RAP, art.74-78_Publicity; LAP, art.81_Contracting board, RAP art.79_Contracting board; LAP, art.82- 84_Awarding for lowest price; RAP art.85- 87_Awarding for lowest price; LAP, art.85- 90_Awarding for multiple criteria; RAP, art.88- 90_Awarding for multiple criteria; LAP, art.91_Restricted procedure; RAP, art.91- 92_Restricted procedure; LAP, art.92_Competitive dialogue and negotiated procedures, RAP, art.91-93_Competitive dialogue and negotiated procedures; DMS, art.2.1.g)_Appointment of consultant; DMS, art.3.2_Appointment of coordinator for safety and	DMS, art.2.1.g)_Appointment of consultant; DMS; art.3.2_Appointment of coordinator for safety and health; EU057, art.3.1_Appointment of coordinator for safety and health
				health; EU018, art.28-31_Contract procedures; EU018, art.41_Informing tenderes; EU018, art.42_Communication; EU018, art.43_Reports; EU018, art.44_Verification of suitability of participants; EU018, art.45-50_Criteria for qualitative selection; EU018, art.53_Contract award criteria; EU018, art.55_Abnormally low tenders; EU057, art.3.1_Appointment of coordinator for safety and health	
		3	Signing the contract with the consultant	LAP, art.93_Notification of contract award; LAP, art.53-58_Signing the contract; LAP, art.36,37,41- 47_Final warranty, RAP, art.55-65_Warranties; LAP, art.94-102_Performance and modification of contracts	LAP, art.53-58_Signing the contract; LAP, art.36- 47_Final warranty; RAP, art.55-65_Final warranty; LAP, art.211-212_Performance and modification of contracts; RAP, art.198-202_Performance and modification of contracts

CLIENT	CONTRACTOR	CONSULTANT
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EMPLOYER		(INSPECTOR OR SUPERVISOR) OF
		WORKS - PROJECT MANAGER
PUBLIC AGENCY	CONSTRUCTION COMPANY	CONSULTING ENGINEERING &
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Р	C	E

CODIFICATION		
3 2	Organisation of the tender for contractor (construction company) (if the DESIGN- BUILT contract was NOT chosen in point 2.1) Choosing the tender method for contractor	LAP, art.13_Contrat purpose; LAP, art.14_Contract price; RAP, art.197_Prices; LAP, art.15-16_Conditions for contracting; RAP, art.97 art.202_Reasons for contracting; LAP, art.73_Preparatory actions for contracting; LAP, art.73_Preparatory actions for contracting; LAP, art.73_Preparatory actions for contracting; LAP, art.73_Preparatory actions for contracting; LAP, art.35_Publicity art.202_Restincted procedure; LAP, art.70- 72_Documentation procedures; LAP, art.71- 72_Documentation procedures; LAP, art.72- 72_Documentation procedure; LAP, art.91- 92_Restricted procedure; LAP, art.91- 92_Restricted procedure; LAP, art.76- 77_Proceedings; LAP, art.192_Contract duration, RAP, art.91-92_Contract duration; LAP, art.201_Invoice as contract; LAP, art.208- 210_Contract procedures; LAP, art.19_Conditions for participation; RAP, art.19_Conditions for participation; RAP, art.19_Conditions for participation; RAP, art.23_Technical specifications; EU018, art.28-31_Contract procedures

CLIENT	CONTRACTOR	CONSULTANT
PROMOTER - OWNER - DEVELOPER - EMPLOYER		ENGINEER / DESIGNER / DIRECTOR (INSPECTOR OR SUPERVISOR) OF
		WORKS - PROJECT MANAGER
PUBLIC AGENCY	CONSTRUCTION COMPANY	CONSULTING ENGINEERING & ARCHITECTURAL (CEA) COMPANY
Р	C	E

2	Running the tender for contractor	LAP, art. 79-80_Receipts of tenders; RAP, art.80- 85_Receipts of tenders; LAP, art.35_Provisional warranty; LAP, art. 41-46_Warranties; RAP, art.55-64_Warranties; EU018, art.35- 36_Publication of notices; EU018, art.38_Time limits for receipts; EU018, art.40_Invitation to submit tenders	LAP, art.53-58_Signing the contract; LAP, art.36- 47_Final warranty; RAP, art.55-65_Final warranty; LAP, art.211-212_Performance and modification of contracts; RAP, art.198-202_Performance and modification of contracts
2 3	Choosing the contractor	LAP, art.78, RAP, art.74-78_Publicity; LAP, art.81_Contracting board, RAP art.79_Contracting board; LAP, art.82- 84_Awarding for lowest price; RAP art.85- 87_Awarding for lowest price; LAP, art.85- 90_Awarding for multiple criteria; RAP, art.88- 90_Awarding for multiple criteria; LAP, art.91_Restricted procedure; RAP, art.91- 92_Restricted procedure; LAP, art.92_Competitive dialogue and negotiated procedures, RAP, art.91-93_Competitive dialogue and negotiated procedures; EU018, art.28- 31_Contract procedures; EU018, art.48_ Rat.41_Informing tenderes; EU018, art.43_Reports; EU018, art.44_Verification of suitability of participants; EU018, art.45-50_Criteria for qualitative selection; EU018, art.53_Contract award criteria; EU018, art.55_Abnormally low tenders	LAP, art.53-58_Signing the contract; LAP, art.36- 47_Final warranty; RAP, art.55-65_Final warranty; LAP, art.211-212_Performance and modification of contracts; RAP, art.198-202_Performance and modification of contracts
4	Signing the contract with the construction company		47_Final warranty; RAP, art.55-65_Final warranty; LAP, art.211-212_Performance and modification of

CLIENT	CONTRACTOR	CONSULTANT
PROMOTER - OWNER - DEVELOPER -		ENGINEER / DESIGNER / DIRECTOR
EMPLOYER		(INSPECTOR OR SUPERVISOR) OF
		WORKS - PROJECT MANAGER
PUBLIC AGENCY	CONSTRUCTION COMPANY	CONSULTING ENGINEERING &
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		CONSTRUCTION PHASE				
1		Organization of the construction works				
	1	Appointment of the construction team manager		LOE, art.9_Promoter	LAP, art.19_Technical team	LOE, art.12-13_Director or inspector of works
	2	Appointment of the other key persons of the construction team				
	3	Planning the cost				
	4	Creation of the schedule for the construction works			RAP, art.144_Work schedule	
1	5	Task division between contractors				
	6	Choosing the suppliers and subcontractors			LAP, art. 115-116_Subcontracting; EU018, art.25_Subcontracting	
	7	Contracting the goods and services				
	8	Setting the health and safety plan			DMS, art.7.1_Setting the health and safety plan; EU057, art.3.2_ Setting the health and safety plan	DMS, art.7.2_ Approval of the health and safety plan; EU057, art.3.2_ Setting the health and safety plan
	9	Setting the quality management plan			RAP, art.145_Testing of materials and work units	
2		Preparation of the construction site				
	1	Surveying		of design project; RAP, art.139-141_Checking of		LAP, art.142_Checking of geometric verification of design project; RAP, art.139-141_Checking of geometric verification of design project
	2	lobsite access				
	-	_				
	-					
1	2	2 3 4 5 6 7 8 9	 Appointment of the construction team manager Appointment of the other key persons of the construction team Planning the cost Creation of the schedule for the construction works Task division between contractors Choosing the suppliers and subcontractors Contracting the goods and services Setting the health and safety plan Setting the quality management plan Surveying Jobsite access Grading Jobsite space allocation 	1Appointment of the construction team manager2Appointment of the other key persons of the construction team3Planning the cost4Creation of the schedule for the construction works5Task division between contractors6Choosing the suppliers and subcontractors7Contracting the goods and services8Setting the health and safety plan9Setting the quality management plan9Setting the access3Grading4Jobsite access3Grading4Jobsite space allocation	1 Appointment of the construction team manager 2 Appointment of the other key persons of the construction team 3 Planning the cost 4 Creation of the schedule for the construction works 5 Task division between contractors 6 Choosing the suppliers and subcontractors 7 Contracting the goods and services 8 Setting the health and safety plan 9 Setting the quality management plan 9 Setting the construction site 1 Surveying 2 Jobsite access 3 Grading 4 Jobsite space allocation	1 Appointment of the construction team manager 2 Appointment of the other key persons of the construction team 3 Planning the cost 4 Creation of the schedule for the construction works 5 Task division between contractors 6 Choosing the suppliers and subcontractors 7 Contracting the goods and services 8 Setting the health and safety plan 9 Setting the quality management plan 9 Setting the quality management plan 1 Surveying 1 Surveying 2 Jobsite access 3 Grading 4 Jobsite access

CLIENT	CONTRACTOR	CONSULTANT
PROMOTER - OWNER - DEVELOPER -		ENGINEER / DESIGNER / DIRECTOR
EMPLOYER		(INSPECTOR OR SUPERVISOR) OF
		WORKS - PROJECT MANAGER
PUBLIC AGENCY	CONSTRUCTION COMPANY	CONSULTING ENGINEERING &
		ARCHITECTURAL (CEA) COMPANY
Р	C	E

2	6	Jobsite security (temporary fencing, security	LPR, art.14.2_Workers' safety and health DMS, art. 11.1 c)_Application of normative in
		personnel, signade and barricades, etc.)	assurance; LPR, art.14.3_Applying normative of labor risks prevention; LPR, art.16_Planning preventive action according to risks assessment; LPR, art.18_Adoppting the necessary measures to inform workers; LPR, art.19_Training of workers; LPR, art.21_Information for workers; LPR, art.24_Coordination of prevention activities with other contractors; LPR, art.26_Protection of pregnant workers; LPR, art. 27_Protection of young
			workers; DMS, art.10_Application of general principles during construction; DMS, art.11.1.c)_Application of normative in labor risk prevention; DMS, art.11.1.d)_Information for workers of measures to be taken; DMS, art.12.1_Obligations of independent workers; DMS, art.15_Information for workers of measures to be taken; DMS, art.16_Participation of workers; RPR, art.2.1_Implementation of a plan for risk prevention that includes organizational structure, functions, practices and procedures; RPR, art.3.2_Discussion with workers about procedures for risks assessment; RPR, art.5.1_Identification of dangerous elements and workers exposed; RPR, art.8_Planning preventive activities according to risks assessment;

CLIENT	CONTRACTOR	CONSULTANT
PROMOTER - OWNER - DEVELOPER -		ENGINEER / DESIGNER / DIRECTOR
EMPLOYER		(INSPECTOR OR SUPERVISOR) OF
		WORKS - PROJECT MANAGER
PUBLIC AGENCY	CONSTRUCTION COMPANY	CONSULTING ENGINEERING &
		ARCHITECTURAL (CEA) COMPANY
Р	C	E

COD	IFICATIO	N		
4	2	6		EU057, art.9.a)_Applying health and safety measures in construction; EU057, art.11.1_Information for workers; EU391, art.6.1_Ensurance of safety and health; EU391, art.6.1&6.2_Measures for ensurance of safety and health; EU391, art.6.3_Evaluation of labor risks; EU391, art.7.1_Designation of one or more workers to carry out activities related to protection and prevention of occupational risks; EU391, art.8.1_Measures for first aid, fire-fighting and evacuation of workers; EU391, art.8.3_Information for workers exposed to risks; EU391, art.9.1.b]_Protective measures to be taken and equipment to be used; EU391, art.10_ information for workers; EU391, art.11.1_Discussion with workers on questions relating to safety and health; EU391, art.13_Protection of particularly sensitive risk groups; EU383, art.3_Information for workers; EU391, art.9_Information of workers; EU391, art.15_Protection of particularly sensitive risk groups; EU383, art.3_Information for workers; EU383, art.4_Training of workers; EU393, art.6.1_Measures to protect the safety and health of young people; EU333, art.6_2_Assessment of hazards of young people at work; EU33, art.6.3_Information for young people of risks prevention
4	3	7	Other Development of relevant construction works	LOE, art.15_Suppliers LAP, art.143_Construction works; RAP, art.142_Incidences and permissions; LPR, art. 15_Application of preventive actions in health and safety; DMS, art.11.1.a)_Application of preventive actions in health and safety

CLIENT	CONTRACTOR	CONSULTANT
PROMOTER - OWNER - DEVELOPER -		ENGINEER / DESIGNER / DIRECTOR
EMPLOYER		(INSPECTOR OR SUPERVISOR) OF WORKS - PROJECT MANAGER
PUBLIC AGENCY	CONSTRUCTION COMPANY	CONSULTING ENGINEERING &
		ARCHITECTURAL (CEA) COMPANY
Р	C	E

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4	4		Control of construction works			
		1	Control of resources			
		2	Control of deliveries and suppliers			
		3	Control of quality (iso 9000)		RAP, art.145_Testing of materials and work units; LOE, art.14_Quality control laboratories	RAP, art.145_Testing of materials and work units; LOE, art.14_Quality control laboratories
4	4	4	Control of health and safety		LPR, art.17_Checking of teams work and means of protection; LPR, art.20_Analyzing possible emergency situations and adopting the necessary measures; LPR, art.22_Workers periodic health monitoring; LPR, art. 23_Document obligations of safety and health; DMS, art.11.1.b)_Safety and health plan; DMS, art.11.2_Checking the preventive measures fixed by the safety and health plan;	fixed by the safety and health plan; DMS, art.13_Book of incidences; DMS, art.14_Suspension of construction works; RPR, art.6.1_Checking of risks assessment; RPR, art.29.1_Obligatory audits
		4			EU057, art.9.1.b)_Coordinator for safety and health matters, EU391, art.9.1.c)_Keeping a list of occupational accidents; EU391, art.9.1.d)_Report all occupational accidents suffered by workers	
		5	Control of environmental issues	LIA, art.7_Inspection; RIA, art.25-27_Inspection; LIA, art.9-10_Suspension of activities and compensations; RIA, art.28-29_ Suspension of activities and compensations		LIA, art.7_Inspection; RIA, art.25-27_Inspection
1		6	Control of time		RAP, art.144_Work schedule	RAP, art.144_Work schedule

CLIENT	CONTRACTOR	CONSULTANT
PROMOTER - OWNER - DEVELOPER -		ENGINEER / DESIGNER / DIRECTOR
EMPLOYER		(INSPECTOR OR SUPERVISOR) OF
		WORKS - PROJECT MANAGER
PUBLIC AGENCY	CONSTRUCTION COMPANY	CONSULTING ENGINEERING &
		ARCHITECTURAL (CEA) COMPANY
Р	C	E

		7	Control of costs / budget		LAP, art.145_Certificates for payments and payments in advance; RAP art.150-152_Certificates for payment; RAP, art.155-156_Payments in advance; RAP, art.147_Measurements; RAP, art.148_Assessment for payment; RAP, art.149_Audience of contractor; RAP, art.153_Prices and expenses	LAP, art.145_Certificates for payments and payments in advance; RAP art.150-152_Certificates for payment; RAP, art.155-156_Payments in advance; RAP, art.147_Measurements; RAP, art.148_Assessment for payment; RAP, art.149_Audience of contractor; RAP, art.153_Prices and expenses
		8	Control of changes		LAP, art.146_Contract modifications; RAP, art.158- 162_Contract modifications; LAP, art.143_Construction works; RAP, art.142_Incidences and permissions; RAP, art.143_Temporary ocupation; LAP, art.144_Dire necessity; RAP, art.146_Dire necessity; RAP, art.170-171_Construction works suspension; RAP, art.172_Legal ruling of contract	LAP, art.146_Contract modifications; RAP, art.158- 162_Contract modifications; LAP, art.143_Construction works; RAP, art.142_Incidences and permissions; RAP, art.143_Temporary ocupation LAP, art.144_Dire necessity; RAP, art.146_Dire necessity; RAP, art.170-171_Construction works suspension; RAP, art.172_ Legal ruling of contract
5			HANDING OVER AND START-UP PHASE			
5	1	1	Closing – out and handing over Contractor notifies the termination of construction works Consultant inspects the infrastructure		RAP, art.163.1 _Notification of termination of construction works	RAP, art.163.2_Approval report
		3	Consultant compiles a list of remaining works (or repairs) to be done Contractor completes the remaing works or		LAP, art. 147.2_Construction works final condition	RAP, art.163.2_Approval report
		5	makes the repairs Consultant issues certificate of substantial completion	RAP, art.163.2_Approval report; RAP, art.164.1_Formal statement of handing over; LOE, art.6_Certificate of substantial completion i buildings	LOE, art.6_Certificate of substantial completion in	RAP, art.164.1_Formal statement of handing over; LOE, art.6_Certificate of substantial completion in buildings

CLIENT	CONTRACTOR	CONSULTANT
PROMOTER - OWNER - DEVELOPER - EMPLOYER		ENGINEER / DESIGNER / DIRECTOR (INSPECTOR OR SUPERVISOR) OF
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PUBLIC AGENCY	CONSTRUCTION COMPANY	CONSULTING ENGINEERING & ARCHITECTURAL (CEA) COMPANY
Р	C	E

		6	Formal handing over of the infrastructure	LAP, art.147_Handing over of construction works and warranties; RAP, art.164.2_Formal statemen of handing over; RAP, art.165_Handing over of partial works; LOE, art.6_Handing over of buildings; LOE, art.17-18_Civil liability		LAP, art.147_Handing over of construction works and warranties; RAP, art.164.2_Formal statement of handing over; RAP, art.165_Handing over of partial works; LOE, art.6_Handing over of buildings; LOE, art.17-18_Civil liability
		7	Taking over of the infrastructure by the client	RAP, art.173_Taking over and registration of the infrastructura by the client; LOE, art.7_Infrastructure (building) documentation; LOE, art.20_Building registration requirements		LOE, art.7_Infrastructure (building) documentation
		8	Economic close-out of the contract between client and contractor, or when apply – client represented by consultant (final payment and release of retainage or warranty)	RAP, art.166_Final measurement of the construction works and final certificate for payment; RAP, art.169_Economic close-out of the contract; LAP, art.149-151_End of contract	RAP, art.166_Final measurement of the construction works and final certificate for payment; RAP, art.169_Economic close-out of the contract; LAP, art.149-151_End of contract	RAP, art.166_Final measurement of the construction works and final certificate for payment; RAP, art.169_Economic close-out of the contract
5	1	9	Termination of direction (inspection or supervision) of works	LAP, art.110_Handing over of consulting services; RAP, art.204_Handing over of consulting services; LAP, art.110-113, 214- 215_Contract fulfilment; RAP, art.135- 137_Contract fulfilment		LAP, art.110_Handing over of consulting services; RAP, art.204_Handing over of consulting services; LAP, art.110-113,214-215_Contract fulfilment; RAP, art.135-137_Contract fulfilment
		10	Economic close-out of the contract between client and consultant (final payment and release of retainage or warranty)	LAP, art.110.4_Economic close-out of consulting services contract; LAP, art.109_End of contract		LAP, art.110.4_Economic close-out of consulting services contract; LAP, art.109_End of contract
5	2		Start-up of the infrastructure operations			