

## **ANNEX A**

### **Categorization of Economic Activities for Assessment Purposes**

- a) This Annex provides guidance as to whether an IEE or EIA is required for any proposed Project or activity. If, as a result of that determination, an IEE or an EIA is determined to be required, then the proponent of the Project or activity will be obliged to prepare, obtain approval for, and implement an appropriate EMP in respect of the proposed Project or activity. Any appeal from such determination must be made in accordance with the EIA Procedure.
- b) If a Project Proponent of an existing Project or activity intends to expand that project or activity, then the Department shall consider and use the type and size thresholds specified in the categorization below as the basis for determining whether such expanded Project or activity will be required to conduct any additional assessment, either in the form of an IEE, an EIA or an EMP.
- c) If a production capacity included in the categorization below has not been explicitly expressed as a total production capacity (e.g. installed capacity for energy production), then the applicable production capacity threshold shall be the total production output under normal operations.
- d) The Ministry reserves the right to interpret, clarify and amend this Annex from time to time as and when it deems necessary in accordance with the Article 30 of the Procedure.

## Type and Criteria of Economic Activities for IEE or EIA

No.	Type of Economic Activity	Criteria for IEE Type Economic Activities	Criteria for EIA Type Economic Activities
<b>SPECIAL INVESTMENT PROJECTS</b>			
1.	Projects in which investment is decided by the Parliament or the government cabinet or the President	-	All sizes
<b>ENERGY SECTOR DEVELOPMENT</b>			
2.	Hydro Power Plants	Installed capacity $\geq$ 1 MW but $<$ 15 MW and Reservoir volume (full supply level) $<$ 20,000,000 m <sup>3</sup> and Reservoir area (full supply level) $<$ 400 ha	Installed capacity $\geq$ 15 MW or Reservoir volume (full supply level) $\geq$ 20,000,000 m <sup>3</sup> or Reservoir area (full supply level) $\geq$ 400 ha
3.	Nuclear Power Plants	-	All sizes
4.	Natural Gas or Bio Gas Power Plants	Installed capacity $\geq$ 5 MW but $<$ 50 MW	Installed capacity $\geq$ 50 MW
5.	Coal-fired Power Plants	Installed capacity $\geq$ 1 MW but $<$ 10 MW	Installed capacity $\geq$ 10 MW
6.	Power Plants from Waste Products	Installed capacity $\geq$ 50 MW	All activities where the Ministry requires that the Project shall undergo EIA
7.	Geothermal Facilities	Installed capacity $\geq$ 5 MW but $<$ 50 MW	Installed capacity $\geq$ 50 MW
8.	Combined Cycle Power Plants (gas & thermal)	Installed capacity $\geq$ 5 MW but $<$ 50 MW	Installed capacity $\geq$ 50 MW
9.	Thermal Power Plants (other than the types in items 4, 5, 6, 7 and 8)	Installed capacity $\geq$ 5 MW but $<$ 50 MW	Installed capacity $\geq$ 50 MW
10.	Wind Power Plants	Installed capacity $\geq$ 5 MW but $<$ 50 MW	Installed capacity $\geq$ 50 MW
11.	Solar Power Plants	Installed capacity $\geq$ 50 MW	All activities where the Ministry requires that the Project shall undergo EIA
12.	Onshore Oil and Gas Seismic Surveys	All sizes	
13.	Onshore Oil and Gas Exploration Drillings	-	All sizes
14.	Onshore Oil and Gas Production drilling and production activities; transportation activities including pipelines; pump stations, compressor stations and	-	All sizes

	storage facilities; ancillary and support operations; and decommissioning		
15.	Offshore Oil and Gas Seismic Surveys	All sizes	-
16.	Offshore Oil and Gas Exploration Drillings	-	All sizes
17.	Offshore Oil and Gas Production drilling and production activities; offshore pipeline operations, offshore transportation, compressor stations and storage facilities; ancillary and support operations; and decommissioning	-	All sizes
18.	Petroleum Refineries or Natural Gas Refineries (including manufacturing of liquefied petroleum gas, motor gasoline, kerosene, diesel oil, heating oil, fuel oil, bitumen, asphalt, sulphur, and intermediate products e.g. propane/propylene mixtures, virgin naphtha, middle distillate and vacuum distillate for the petrochemical industry)	-	All sizes
19.	Natural Gas Processing Plants; production of liquid products from natural gas (this may include methanol and petroleum liquid products such as naphtha, gasoline, kerosene, diesel fuel, waxes, and lubes)	-	All sizes
20.	Natural Gas Liquefaction Plants	-	All sizes
21.	Oil or Natural Gas Terminals	-	All sizes
22.	Petroleum Depots or Liquid Gas Depots	Storage capacity Petroleum < 10,000 t; Liquid gas < 2,500 t	Storage capacity Petroleum ≥ 10,000 t; Liquid gas ≥ 2,500 t
23.	Oil or Gas Transmission or Distribution Systems	< 10 km	≥ 10 km
24.	Filling Stations (including liquefied petroleum gas and compressed natural gas)	≥ 10 m <sup>3</sup> (10,000 l) fuel storage capacity	All activities where the Ministry requires that the Project shall undergo EIA
25.	Petroleum-based Organic Chemicals Manufacturing	-	All sizes
26.	Electrical Power Transmission Lines ≥ 115 kV but < 230 kV	≥ 50 km	All activities where the Ministry requires that the Project shall undergo EIA
27.	Electrical Power Transmission Lines ≥ 230 kV	All sizes	All activities where the Ministry requires that the Project shall undergo EIA
28.	High Voltage (230 kV and 500 kV) Transformer Substations	≥ 4 ha	All activities where the Ministry requires that the Project shall undergo EIA

<b>AGRICULTURE, LIVESTOCK AND FORESTRY DEVELOPMENT</b>			
29.	Plantation Industrial/Crop Production (e.g. rubber, palm oil, cocoa, coffee, tea, bananas, sugar cane)	≥ 200 ha but < 500 ha	≥ 500 ha
30.	Annual Crop Production (e.g. cereals, pulses, roots, tubers, oil-bearing crops, fibre crops, vegetables, and fodder crops)	≥ 500 ha but < 3,000 ha	≥ 3,000 ha
31.	Livestock Farms (e.g. cows, buffaloes, horses, goats, sheep and others)	≥ 500 livestock units but < 3,000 livestock units	≥ 3,000 livestock units
32.	Farms for Poultry and Other Commercially Raised Fowl	Fowl (poultry, ducks, turkeys) ≥ 5,000 but < 20,000 Ostriches ≥ 50 but < 200 Quail ≥ 25,000 but < 100,000	Fowl ≥ 20,000 Ostriches ≥ 200 Quail ≥ 100,000
33.	Pig Farms	≥ 2,000 pigs but < 5,000 pigs	≥ 5,000 pigs
34.	Inland Fish Raising and Aquaculture (in rivers, lakes, ponds; including shrimp raising)	Total water surface ≥ 1 ha but < 25 ha	Total water surface ≥ 25 ha
35.	Marine and Coastal Fish Raising and Aquaculture	Total water surface ≥ 1 ha but < 100 ha	Total water surface ≥ 100 ha
36.	Oyster Raising and Pearl Production	≥ 50 ha but < 200 ha	≥ 200 ha
37.	Raising and Caring for Wild Animals	All sizes	All activities where the Ministry requires that the Project shall undergo EIA
38.	Reptile Farms	Alligators, monitor lizards or pythons < 1,000 reptiles Other reptiles < 5,000	≥ 1,000 alligators, monitor lizards or pythons Other reptiles ≥ 5,000
39.	Clear-cut Logging	< 500 ha	≥ 500 ha
40.	Concession Forest	< 10,000 ha	≥ 10,000 ha
41.	Irrigation Systems	≥ 100 ha but < 5,000 ha	≥ 5,000 ha
<b>MANUFACTURING</b>			
<b><i>Food and Beverage Manufacturing</i></b>			
42.	Meat Processing Plants (slaughter of cattle, pigs, sheep and other livestock)	≥ 15 t/d but < 50 t/d carcass production	≥ 50 t/d carcass production
43.	Poultry Processing Plants (slaughter of poultry and other commercially raised fowl)	≥ 15 t/d but < 50 t/d carcass production	≥ 50 t/d carcass production
44.	Fish Processing Plants (fish, crustaceans, gastropods, cephalopods, and bivalves; includes by-products such	≥ 15 t/d but < 75 t/d	≥ 75 t/d

	as fish oil and fish meals)		
45.	Food and Beverage Processing Facilities (processing of beef, pork, mutton and poultry meats, vegetable, and fruit raw materials into value-added food and non-fermented beverage products for human consumption)	≥ 10 t/d but < 20 t/d	≥ 20 t/d
46.	Dairy Processing Plants (reception, storage, and industrial processing of raw milk and the handling and storage of processed milk and dairy products)	≥ 200 t/d raw milk on annual average basis	All activities where the Ministry requires that the Project shall undergo EIA
47.	Manufacture of Animal Feeds	≥ 100 t/d but < 300 t/d product ( < 600 t/d if production is operating a maximum of 90 d/a)	≥ 300 t/d product (≥ 600 t/d if production is operating a maximum of 90 d/a)
48.	Vegetable Oil Production and Processing Facilities	≥ 100 t/d but < 300 t/d product ( < 600 t/d if production is operating a maximum of 90 d/a)	≥ 300 t/d product (≥ 600 t/d if production is operating a maximum of 90 d/a)
49.	Manufacture of Starches and Starch Products	≥ 100 t/d but < 300 t/d product ( < 600 t/d if production is operating a maximum of 90 d/a)	≥ 300 t/d product (≥ 600 t/d if production is operating a maximum of 90 d/a)
50.	Manufacture of Grain Mill Products (grain milling, rice milling, production of rice flour, vegetable milling, coffee and cocoa milling, manufacture of flour)	≥ 100 t/d but < 300 t/d product ( < 600 t/d if production is operating a maximum of 90 d/a)	≥ 300 t/d product (≥ 600 t/d if production is operating a maximum of 90 d/a)
51.	Monosodium Glutamate (seasoning powder) Factories	≥ 50 t/d but < 100 t/d	≥ 100 t/d
52.	Sugar Manufacturing Plants	≥ 50 t/d but < 300 t/d refined sugar ( < 600 t/d if production is operating a maximum of 90 d/a)	≥ 300 t/d refined sugar (≥ 600 t/d if production is operating a maximum of 90 d/a)
53.	Alcohol, Wine and Beer Production Factories	≥ 50,000 l/d but < 300,000 l/d product ( < 600,000 l/d if production is operating a maximum of 90 d/a)	≥ 300,000 l/d product (≥ 600,000 l/d if production is operating a maximum of 90 d/a)
54.	Non-Alcohol Factories (soda, soft drink, mineral water production)	≥ 20,000 l/d	All activities where the Ministry requires that the Project shall undergo EIA
55.	Ice Factories	≥ 500 t/d but < 2,000 t/d	≥ 2,000 t/d
56.	Drinking Water Factories (for bottled refined water)	≥ 100,000 l/d	All activities where the Ministry requires that the Project shall undergo EIA

57.	Tobacco Processing Plants	$\geq 1$ t/d but $< 15$ t/d product	$\geq 15$ t/d product
<b>Garments, Textiles and Leather Products</b>			
58.	Textile Manufacturing Facilities (production of yarn, fabric, garments and finished goods based on natural fibres, synthetic fibres and/or regenerated fibres)	All sizes	All activities where the Ministry requires that the Project shall undergo EIA
59.	Pre-treatment (washing, bleaching, mercerisation) or Dyeing of Textiles or Fibres	$\geq 1$ t/d but $< 10$ t/d	$\geq 10$ t/d
60.	Leather Products Manufacturing (includes synthetic leather, handbags, luggage, saddle, footwear)	$\geq 1,000$ t/a	All activities where the Ministry requires that the Project shall undergo EIA
61.	Tanning and Leather Finishing	$< 12$ t/d finished products	$\geq 12$ t/d finished products
<b>Wood Manufacturing</b>			
62.	Sawmilling and Manufactured Wood Products	Sawmills: input $\geq 3,000$ m <sup>3</sup> /a but $< 50,000$ m <sup>3</sup> /a Wood products: input $\geq 1,000$ m <sup>3</sup> /a but $< 15,000$ m <sup>3</sup> /a	Sawmills: input $\geq 50,000$ m <sup>3</sup> /a Wood products: input $\geq 15,000$ m <sup>3</sup> /a
63.	Board and Particle-based Products Manufacturing (board and particle-based products, plywood and glued and laminated products, board from other raw materials such as sugar cane bagasse, straw, and linen)	$< 600$ m <sup>3</sup> /d or $< 420$ t/d	$\geq 600$ m <sup>3</sup> /d or $\geq 420$ t/d
64.	Pulp and/or Paper Mills	$\geq 20$ t/d but $< 50$ t/d	$\geq 50$ t/d
65.	Printing or Other Surface Treatment Facilities (using organic solvents, in particular for dressing, printing, coating, degreasing, waterproofing, sizing, painting, cleaning or impregnating)	$\geq 6$ kg/h but $< 150$ kg/h consumption of organic solvents	$\geq 150$ kg/h or $\geq 200$ t/a consumption of organic solvents
<b>Chemicals Manufacturing</b>			
66.	Large Volume Inorganic Compounds Manufacturing and Coal Tar Distillation (includes ammonia, acids [nitric, hydrochloric, sulphuric, hydrofluoric, phosphoric acid], chlor-alkali	-	All sizes

	[e.g. chlorine, caustic soda, soda ash], carbon black, and coal tar distillation [naphthalene, phenanthrene, anthracene])		
67.	Petroleum-based Polymers Manufacturing Plants	-	All sizes
68.	Coal Processing Plants (processing of coal into gaseous or liquid chemicals including fuels)	-	All sizes
69.	Chemical Fertilizer Manufacturing Plants	-	All sizes
70.	Pesticide Manufacturing, Formulation, and Packaging Plants	-	All sizes
71.	Oleochemicals Manufacturing Plants (production of fatty acids, lycerine, and biodiesel using fats and oils from vegetable or animal sources)	-	All sizes
72.	Pharmaceuticals and Biotechnology Manufacturing Plants	< 50 t/a	≥ 50 t/a
73.	Other Basic Organic Chemicals Manufacturing Plants	-	All sizes
74.	Other Basic Inorganic Chemicals Manufacturing Plants	-	All sizes
75.	Other Chemical Products Manufacturing Plants (e.g. paints, inks, varnishes, soap, detergents, perfumes, pyrotechnic products, photographic chemicals)	≥ 5 t/d but < 10 t/d	≥ 10 t/d
76.	Explosives Manufacturing Plants	-	All sizes
77.	Manufacturing of Extinguishers and Other Firefighting Products	All sizes	All activities where the Ministry requires that the Project shall undergo EIA
78.	Manufacturing of CO <sub>2</sub> Gas and Filling and Liquefying Industrial Gas	≥ 1,000 t/a but < 3,000 t/a	≥ 3,000 t/a
<b>Manufacture of Glass and Ceramics</b>			
79.	Glass, Glass Fibre or Mineral Fibre Manufacturing Plants	All sizes	All activities where the Ministry requires that the Project shall undergo EIA
80.	Ceramic Tile and Sanitary Ware Manufacturing Plants	≥ 1,000 t/a fine ceramics ≥ 10,000 t/a ceramic tiles	All activities where the Ministry requires that the Project shall undergo EIA

<b>Manufacture of Construction Materials</b>			
81.	Cement and Lime Manufacturing Plants	Cement ≥ 10 t/h but < 30 t/h Lime ≥ 20 t/d but < 50 t/d	Cement ≥ 30 t/h Lime ≥ 50 t/d
82.	Clinker Plants	All sizes	All activities where the Ministry requires that the Project shall undergo EIA
83.	Other Construction Supplies and Materials Production	≥ 30,000 t/a but < 50,000 t/a	≥ 50,000 t/a
84.	Asphalt Production Plants	< 100 t/d	≥ 100 t/d
<b>Metal, Machinery and Electronics</b>			
85.	Base Metal Smelting and Refining Plants (base metal smelting and refining of lead, zinc, copper, nickel, and aluminium)	Non-ferrous metal < 20 t/d melting capacity, except for lead and cadmium < 4 t/d melting capacity	Non-ferrous metal ≥ 20 t/d melting capacity, except for lead and cadmium ≥ 4 t/d melting capacity
86.	Manufacture of Pig Iron, Raw and Low Alloy Steel from Iron Ore or Scrap Metal	< 2.5 t/h	≥ 2.5 t/h
87.	Foundries (casting ferrous [iron and steel] and nonferrous [primarily aluminium, copper, zinc, lead, tin, nickel, magnesium, and titanium] metals)	Ferrous metal < 20 t/d production capacity Non-ferrous metal < 20 t/d production capacity except for lead and cadmium < 4 t/d production capacity	Ferrous metal ≥ 20 t/d production capacity Non-ferrous metal ≥ 20 t/d production capacity except for lead and cadmium ≥ 4 t/d production capacity
88.	Non-ferrous Metal Melting, Smithy and Filigree	Production capacity ≥ 5 t/d but < 20 t/d	Production capacity ≥ 20 t/d
89.	Shipyards and Ship Building Enterprises	< 1 ha and < 20,000 t lifting capacity	≥ 1 ha or ≥ 20,000 t lifting capacity
90.	Locomotives and Other Railway Rolling Material Manufacturing, Repairing and Assembling	-	≥ 100 vehicles/a
91.	Metal, Plastic, Fibre and Rubber Products Manufacturing Plants (material processing operations common to multiple industries engaged in the manufacture of metal, plastic, fibre, and rubber products)	≥ 5,000 m <sup>2</sup> production area, or ≥ 6 kg/h consumption of organic solvents	All activities where the Ministry requires that the Project shall undergo EIA
92.	Rubber and Latex Processing Plants	≥ 2,000 t/a	All activities where the Ministry requires that the Project shall undergo EIA
93.	Vehicle Tire Manufacturing Plants	≥ 5,000 m <sup>2</sup> production area, or ≥ 6 kg/h consumption of organic solvents	All activities where the Ministry requires that the Project shall undergo EIA
94.	Semiconductors and Other Electronics Manufacturing	≥ 5,000 m <sup>2</sup> production area, or	All activities where the Ministry requires that



	Plants(manufacturing of semiconductors, printed circuit boards, printed wiring assemblies, screens, passive components, and magnetic devices)	≥ 6 kg/h consumption of organic solvents	the Project shall undergo EIA
95.	Electronic and Electric Equipment Manufacturing Plants(computers, communication equipment, consumer electronics [cooking, washing, food, warm and cooling domestic and public electronic], laboratory equipment, electric motors, electric lightning etc.)	≥ 5,000 m <sup>2</sup> production area, or ≥ 6 kg/h consumption of organic solvents	All activities where the Ministry requires that the Project shall undergo EIA
96.	Batteries and Accumulators Manufacturing Plants	< 3,000 t/a	≥ 3,000 t/a
97.	Machinery, Vehicles and Equipment Manufacturing Plants	≥ 5,000 m <sup>2</sup> production area, or ≥ 6 kg/h consumption of organic solvents	All activities where the Ministry requires that the Project shall undergo EIA
98.	Motor Vehicle and Motor Bike Assembly Plants	≥ 5,000 m <sup>2</sup> production area, or ≥ 6 kg/h consumption of organic solvents	All activities where the Ministry requires that the Project shall undergo EIA
99.	Motor Vehicle Accessories, Related Equipment and Engine Manufacturing Factories	≥ 5,000 m <sup>2</sup> production area, or ≥ 6 kg/h consumption of organic solvents	All activities where the Ministry requires that the Project shall undergo EIA
100.	Motor Vehicle Maintenance Workshops	Utilization area ≥ 5,000 m <sup>2</sup>	All activities where the Ministry requires that the Project shall undergo EIA
101.	Car Breaking	< 10 vehicles/d, < 50 motorbikes/d	≥ 10 vehicles/d ≥ 50 motorbikes/d
102.	Weapons and Ammunition Manufacturing Plants	-	All sizes
<b>WASTE MANAGEMENT</b>			
103.	Non-Hazardous Waste Disposal Facilities	Landfills < 10 t/d and total capacity < 25,000 t Others < 50 t/d	Landfills ≥ 10 t/d or total capacity ≥ 25,000 t Others ≥ 50 t/d
104.	Non-Hazardous Waste Incinerators	< 3 t/h	≥ 3 t/h
105.	Non-Hazardous Waste Recycling, Recovery or Reuse Facilities	< 50 t/d	≥ 50 t/d
106.	Hazardous Waste Disposal Facilities	-	All sizes

107.	Hazardous Waste Recycling, Recovery or Reuse Facilities	< 10 t/d	≥ 10 t/d
108.	Wastewater Treatment Plants (centralized systems)	-	All sizes
109.	Wastewater and Storm Water Collection Systems	Length ≥ 1 km but < 10 km	≥ 10 km
<b>WATER SUPPLY</b>			
110.	Groundwater Development for Industrial, Agricultural or Urban Water Supply	< 4,500 m <sup>3</sup> /d	≥ 4,500 m <sup>3</sup> /d
<b>INFRASTRUCTURE AND SERVICE DEVELOPMENT</b>			
111.	Dams and Reservoirs	Dam height < 15 m and Reservoir area < 400 ha	Dam height ≥ 15 m or Reservoir area ≥ 400 ha
112.	Lake, River and Channel Land Filling which Impacts on the Public	Area < 50 ha	Area ≥ 50 ha
113.	Other Large Civil Works Construction (embankments, seawalls, offshore breakwater)	Length < 2 km and Area < 25 ha	Length ≥ 2 km or Area ≥ 25 ha
114.	Dredging	Total < 500,000 t	Total ≥ 500,000 t
115.	River Channel Conservation (surface water & water volume control)	-	All sizes
116.	Shipping(operation and maintenance of ships used for the transport of bulk cargo, and goods, and ship breaking)	All sizes	All activities where the Ministry requires that the Project shall undergo EIA
117.	Ports, Harbours, and Terminals(ports, harbours, and terminals for cargo and passengers transfer)	Area < 25 ha	Area ≥ 25 ha
118.	Industrial Zone Construction and Development	-	All sizes
119.	Special Economic Zone Construction and Development Project	-	All sizes
120.	Construction of Radio Transceiver Stations and Telecommunications Transceiver Stations	-	≥ 3 kW
121.	Telecommunications Network Construction Project (fixed line and wireless transmission infrastructure, including long distance terrestrial and submarine	-	≥ 100 km

	cables, radio and television broadcasting, and associated telecommunications and broadcasting installations and equipment)		
122.	Hospitals	All sizes	All activities where the Ministry requires that the Project shall undergo EIA
123.	Cemeteries and Crematoria(for burial, incineration and other forms)	All sizes	-
124.	Residential, Housing Development, Resettlement Construction and Urbanization Project and New Town Construction Project	≥ 50 ha (123.5 acre) but < 100 ha (247 acre)	≥ 100 ha (247 acre)
125.	Dormitories, Condominium Building Construction	-	Building ≥ 23 m high or floor area ≥ 10,000 m <sup>2</sup>
126.	Tourism and Hospitality Development	≥ 80 rooms but < 200 rooms or total utilization area ≥ 200,000 m <sup>2</sup> but < 500,000 m <sup>2</sup>	≥ 200 rooms or total utilization area is ≥ 500,000 m <sup>2</sup>
127.	Hill Station Resort or Resort Construction Project	-	≥ 80 rooms or total utilization area ≥ 4,000 m <sup>2</sup>
128.	Hotel or Resort Construction Project Near Rivers or Coastal Areas	-	≥ 80 rooms
129.	Buildings Located Near Rivers, Seacoast, Lakes or Beaches, or in the Vicinity or Inside National Parks or Historical Parks Which May Cause Adverse Impacts to Environmental Quality	-	Buildings ≥ 13 m high or floor area ≥ 4,000 m <sup>2</sup>
130.	Tourism and Resort Development Project in National, Regional or State Protected Area	-	≥ 50 ha (123.5 acre)
131.	Development of Tourist or Recreational Facilities on Islands in Surrounding Waters Which Are Gazetted as National Marine Park	-	All sizes
132.	Construction of Shopping Malls, Trade Centers and Supermarkets	-	≥ 1,500 m <sup>2</sup>
133.	Restaurants and Food Centers	-	≥ 500 seats
134.	Building Works With Basement	-	Basement ≥ 10 m depth

135.	Other Service Centers (comprising infrastructure facilities and physical foundation)	-	Wastewater volume $\geq 500 \text{ m}^3/\text{d}$
136.	Golf Courses	9 holes	18 holes
137.	Multi-games Sport Project	-	All sizes
<b>TRANSPORTATION</b>			
138.	Railways and Tramways (construction and maintenance of rail infrastructure and operation of rolling stock)	Length $< 5 \text{ km}$	Length $\geq 5 \text{ km}$
139.	Cable Cars	Length $< 0.5 \text{ km}$	Length $\geq 0.5 \text{ km}$
140.	Airports and Runway Construction	Runway length $< 2,100 \text{ m}$	Runway length $\geq 2,100 \text{ m}$
141.	Bridges, River Bridges and Viaducts (new construction)	Length $\geq 200 \text{ m}$ but $< 2 \text{ km}$	Length $\geq 2 \text{ km}$
142.	Bridges, River Bridges and Viaducts (upgrading)	Length $\geq 300 \text{ m}$	All activities where the Ministry requires that the Project shall undergo EIA
143.	Tunnels	Length $< 1 \text{ km}$	Length $\geq 1 \text{ km}$
144.	Expressways and Highways (ASEAN Highway Standard; new construction or widening)	Length $\geq 2 \text{ km}$ but $< 50 \text{ km}$	Length $\geq 50 \text{ km}$
145.	Other Roads (state, region, district, urban; new construction or widening)	Length $\geq 50 \text{ km}$ but $< 100 \text{ km}$	Length $\geq 100 \text{ km}$
146.	Road Improvement (upgrading from seasonal to all weather surface, widening of shoulders)	Length $\geq 50 \text{ km}$	All activities where the Ministry requires that the Project shall undergo EIA
147.	Construction of Highway Bus Station or Terminal	-	$\geq 5 \text{ ha}$ (12.35 acre)
<b>MINING</b>			
148.	Extraction of Rock, Gravel or Sand from a River or Marine Waters	$\geq 1,000 \text{ m}^3/\text{a}$ but $< 50,000 \text{ m}^3/\text{a}$	$\geq 50,000 \text{ m}^3/\text{a}$
149.	Construction, Building and Ceramic Minerals Extraction (aggregates, limestone, slates, clay, gypsum, feldspar, silica sands, granite, kaolin, bentonite, marble, and quartzite)	$< 200 \text{ acre}$ and $< 100,000 \text{ t/a}$	$\geq 200 \text{ acre}$ or $\geq 100,000 \text{ t/a}$
150.	Extraction and Refining of Industrial Minerals (barite, fluorite, phosphate, potash, salt, soda ash, asbestos)	$< 200 \text{ acre}$ and $< 100,000 \text{ t/a}$ ore	$\geq 200 \text{ acre}$ or $\geq 100,000 \text{ t/a}$ ore
151.	Extraction of Ferrous, Non-Ferrous Metal and	$< 50 \text{ acre}$	$\geq 50 \text{ acre}$

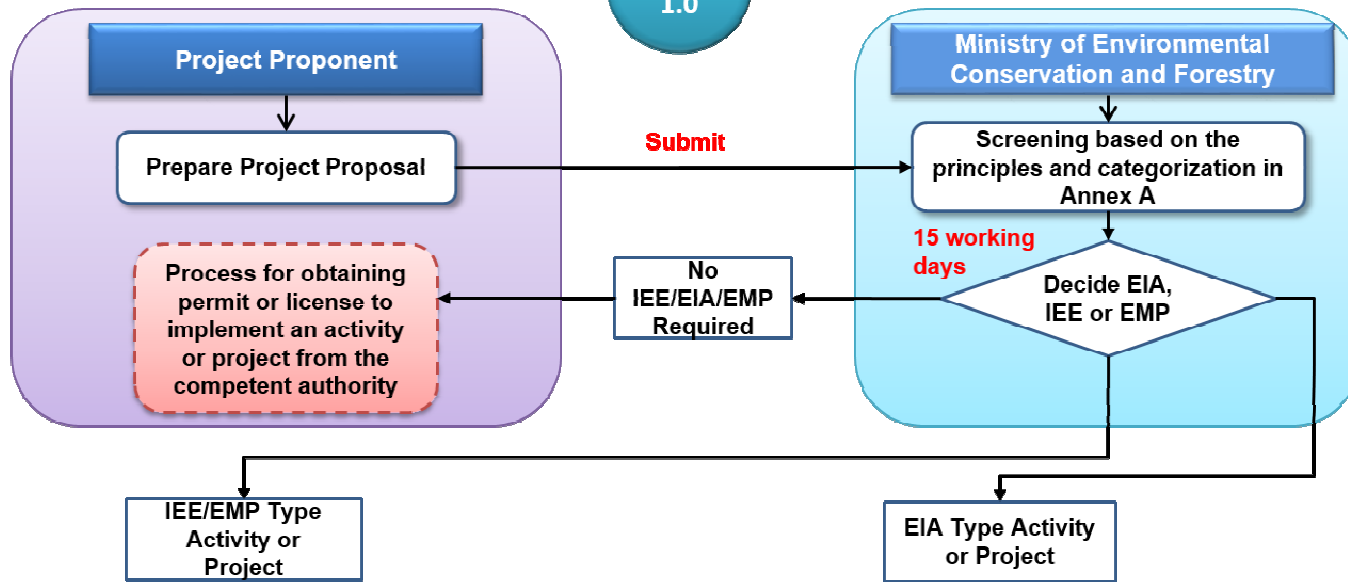
	Precious Metal Ore Except Gold (iron, manganese, silver, copper, tin, antimony, lead, nickel, zinc, chromium, bauxite), and Precious Stone	and < 50,000 t/a	or ≥ 50,000 t/a
152.	Refining of Metal Mineral Ore (without using hazardous chemicals)	<50,000 t/a	≥50,000 t/a
153.	Refining of Metal Mineral Ore (using hazardous chemicals)	<25,000 t/a	≥25,000 t/a
154.	Extraction and Refining of Gold Ore (without using hazardous chemicals)	<20 acre	≥ 20 acre
155.	Extraction and Refining of Gold Ore (using hazardous chemicals)	<20 acre and <25,000 t/a	≥20 acre or ≥25,000 t/a
156.	Coal Mining (underground and surface)	< 100,000 t/a coal	≥ 100,000 t/a coal
157.	Mining, including Dredging of Heavy Mineral Sands(tungsten, ilmenite, rutile, zircon, titanium, monazite)	≥ 1,000 m <sup>3</sup> /a but < 50,000 m <sup>3</sup> /a	≥ 50,000 m <sup>3</sup> /a

## **ANNEX B**

### **Environmental Impact Assessment Procedure Flowchart**

# Project Proposal Screening

Chart 1.0

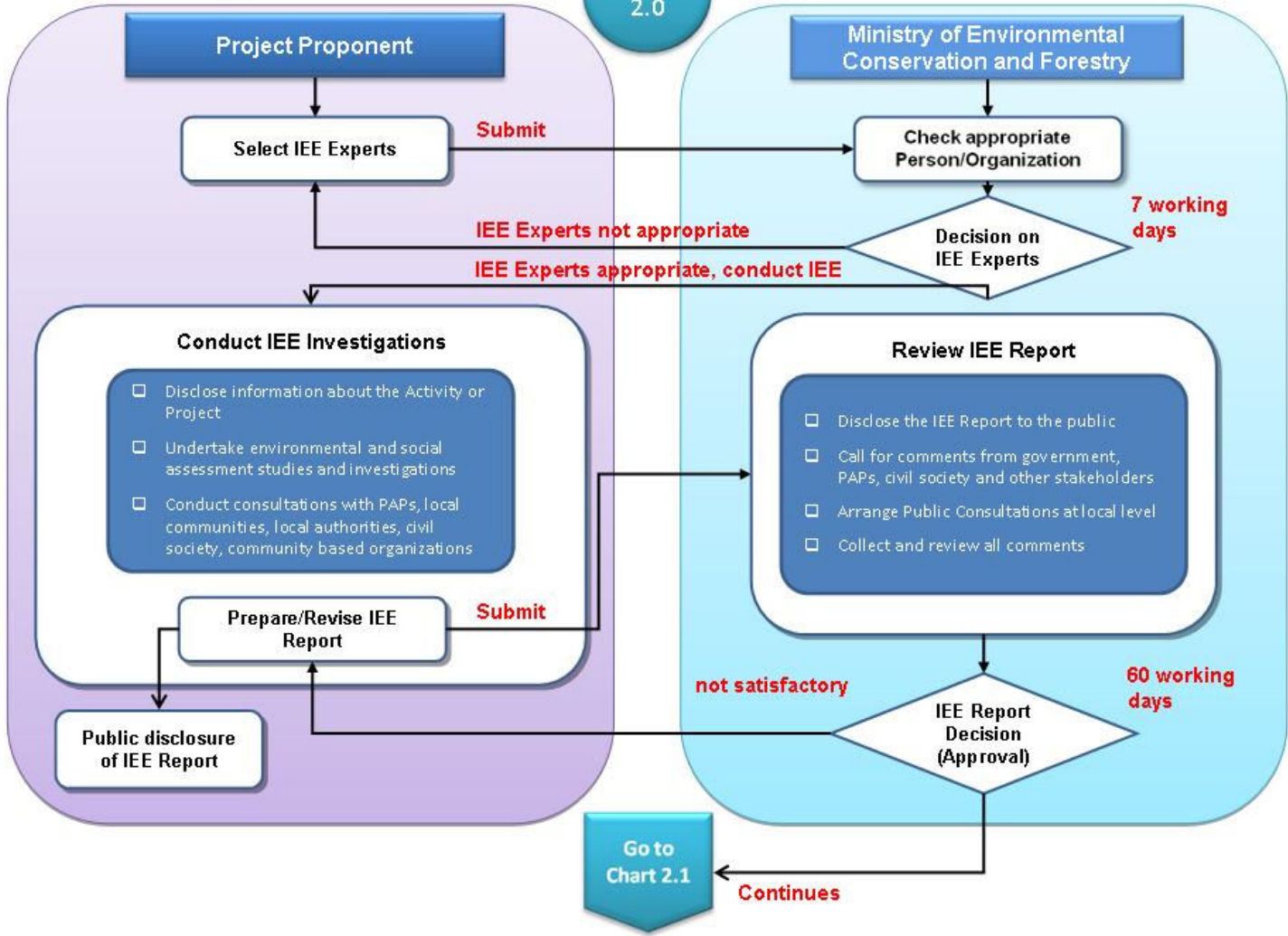


- Chart 2.0 IEE Investigations and Review
- Chart 2.1 IEE Review and Approval Process
- Chart 2.2 EMP Review and Approval Process

- Chart 3.0 Scoping (EIA)
- Chart 3.1 EIA Investigations and Review
- Chart 3.2 EIA Review and Approval
- Chart 4.0 Appeal Process

# IEE Investigations and Review

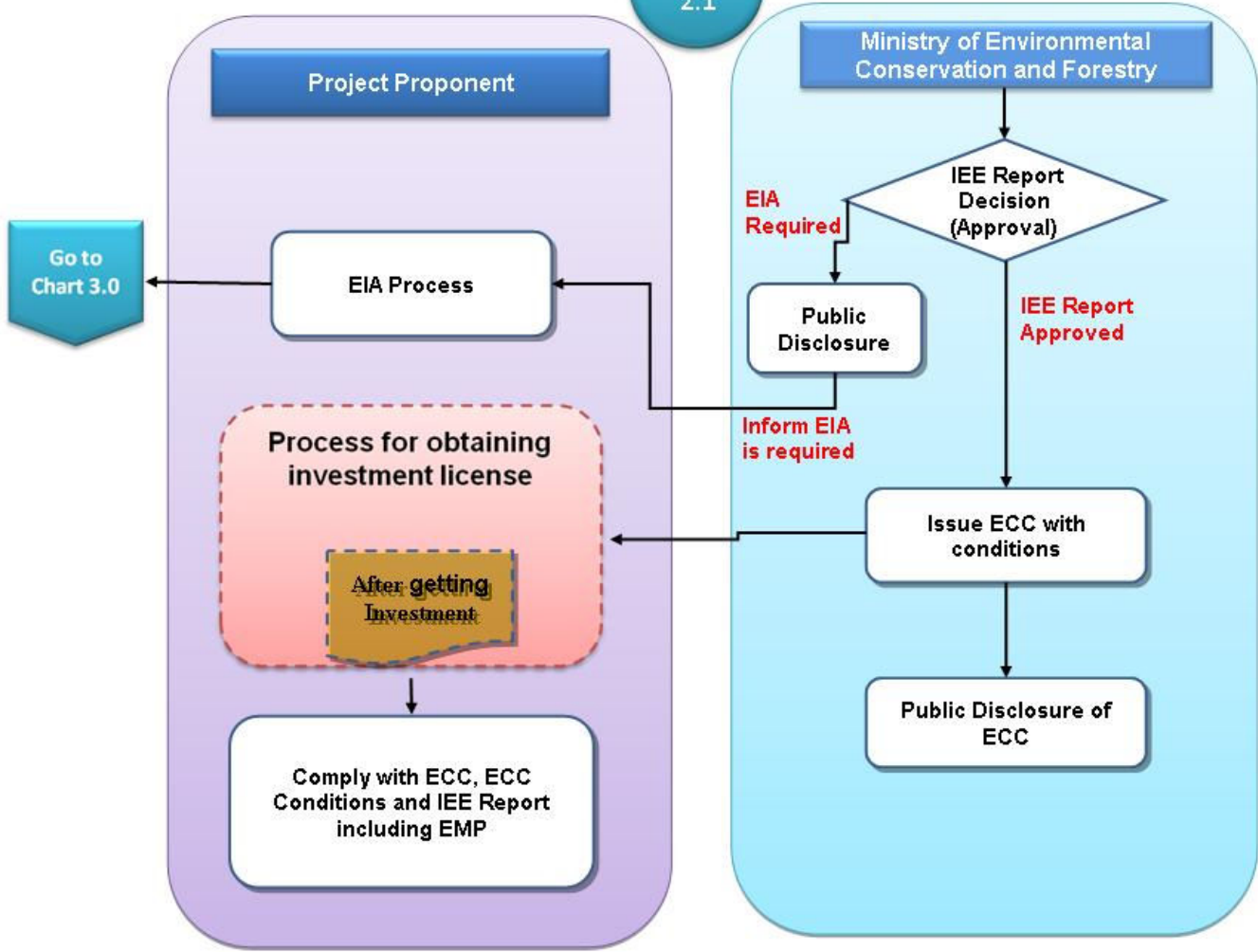
Chart 2.0





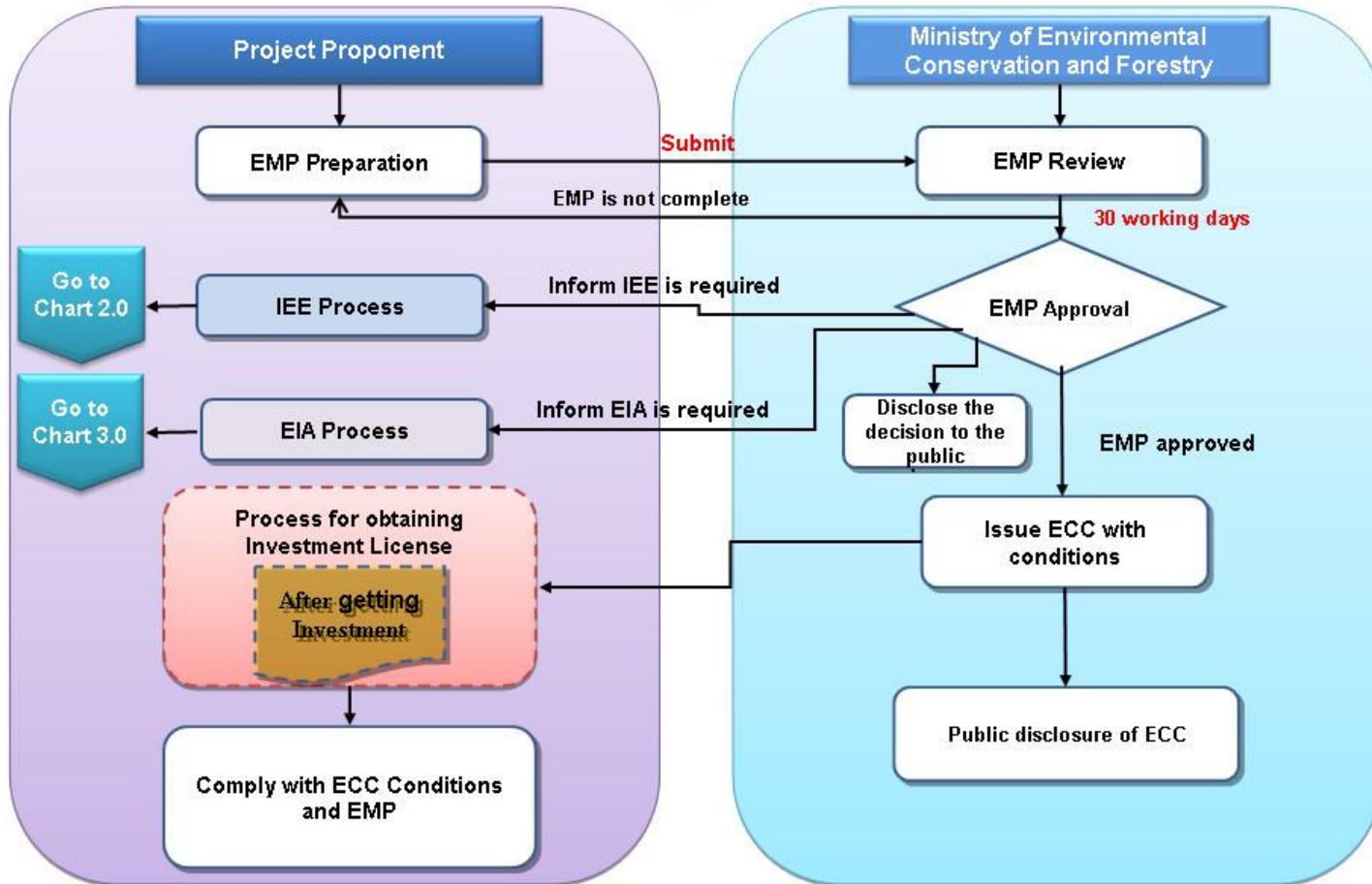
# IEE Review and Approval

Chart 2.1



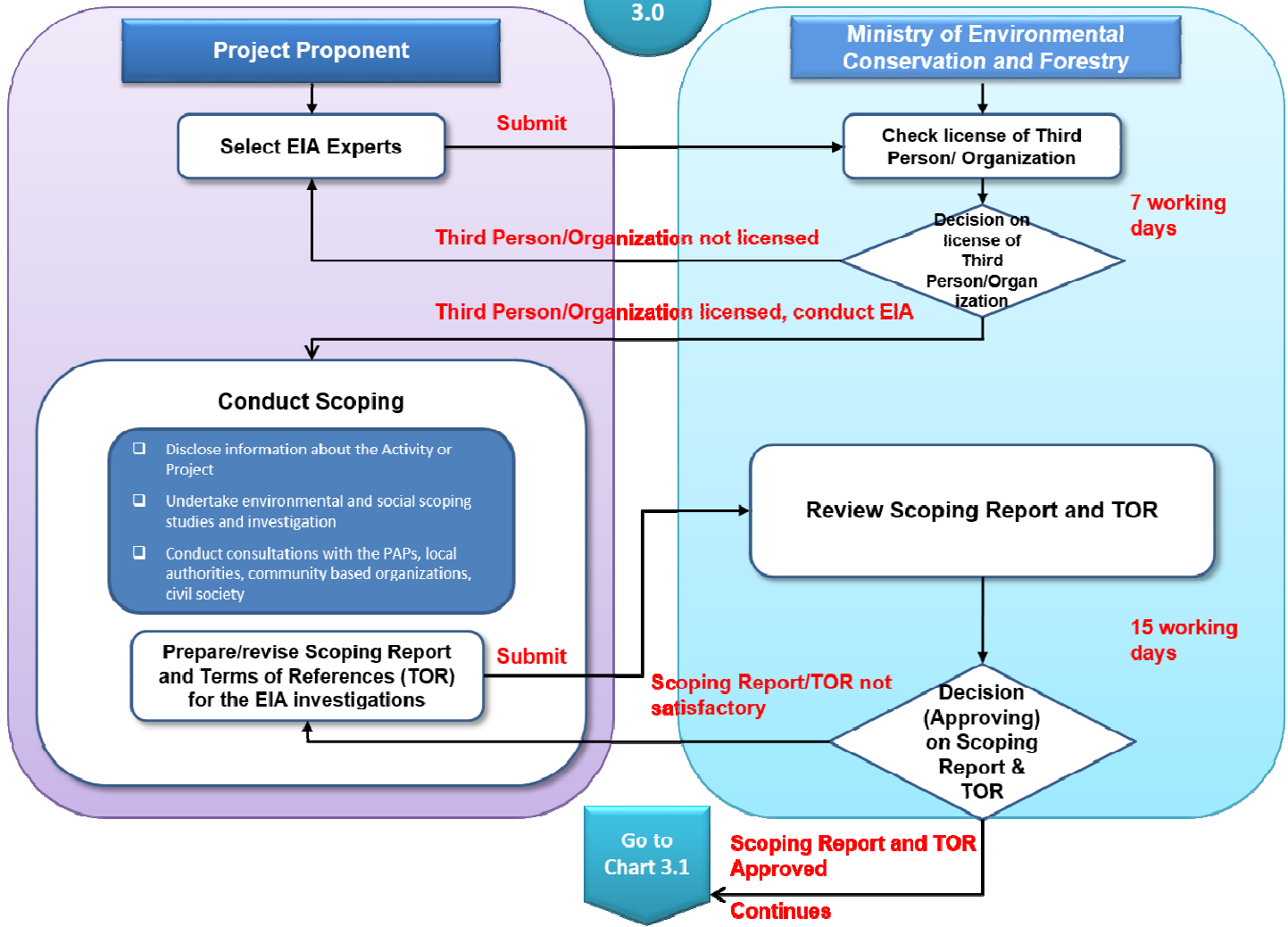
# EMP Review and Approval

Chart 2.2



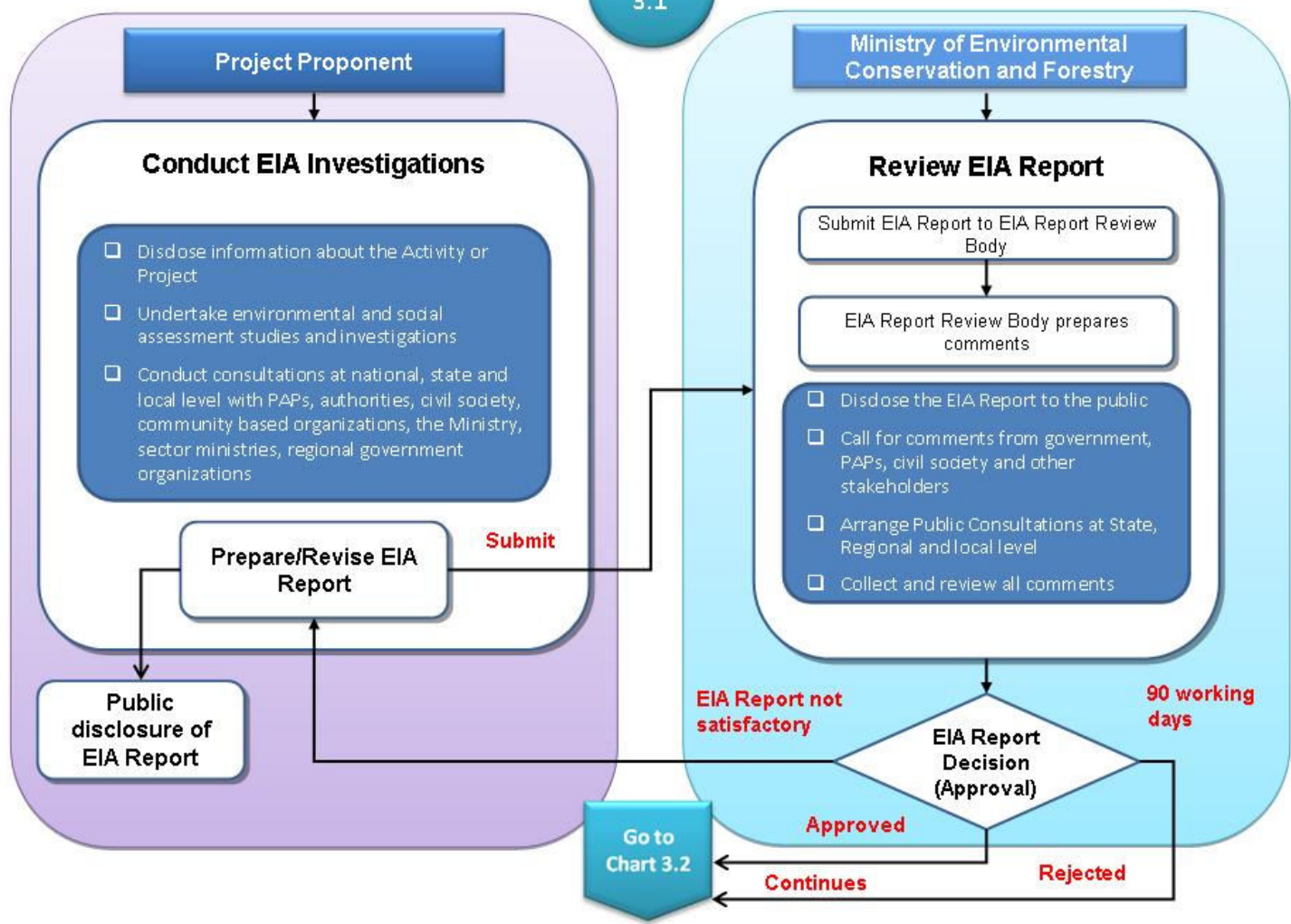
# Scoping (EIA)

Chart 3.0



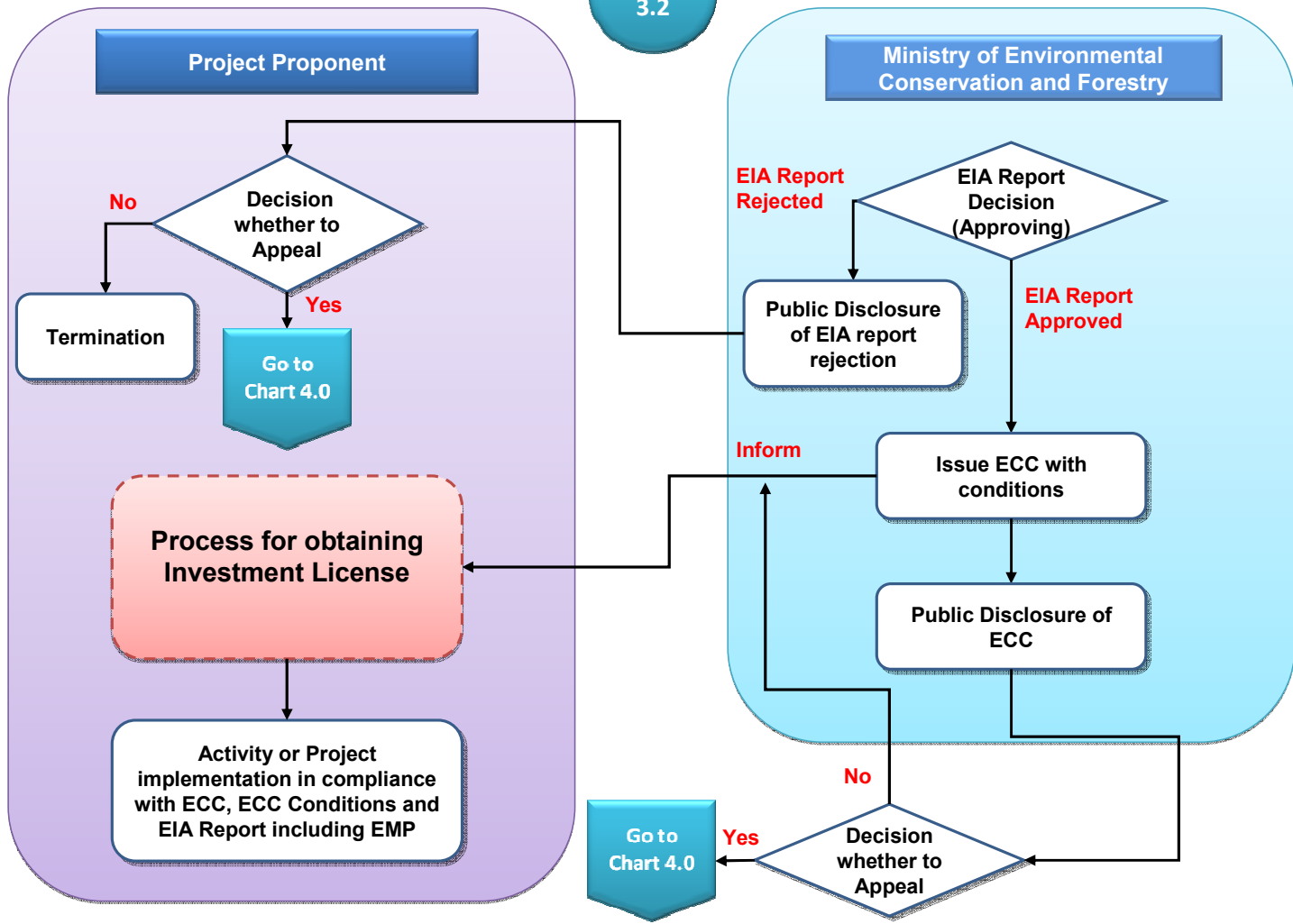
# EIA Investigations and Review

Chart 3.1



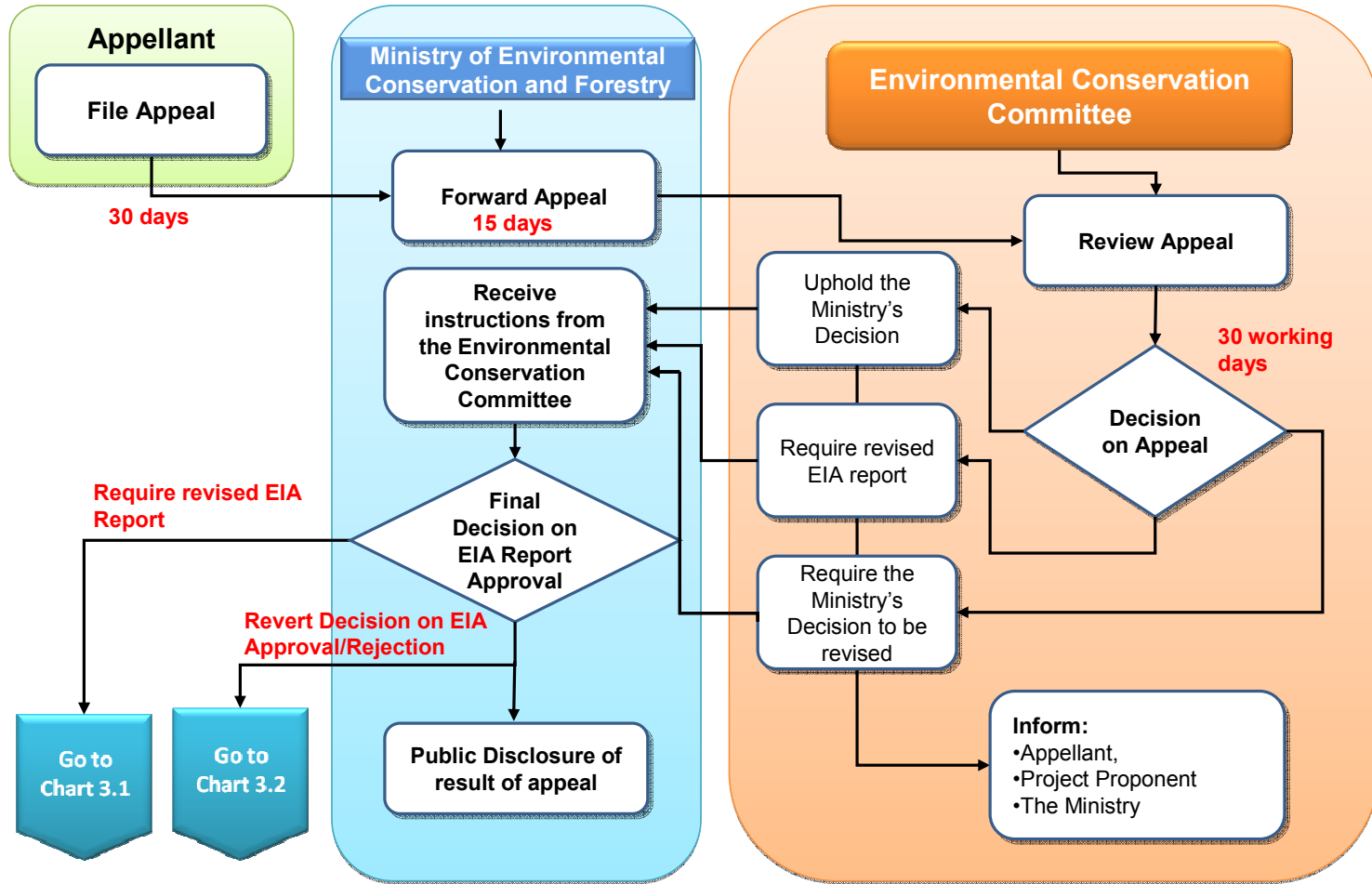
# EIA Review and Approval

Chart 3.2



# Appeal Process

Chart 4.0



## ANNEX C

### Penalties and other Administrative Punishment

When the Ministry imposes penalties on a Project for breach of Project conditions according to Article 125 of the EIA Procedure, the Project shall pay prescribed penalties in full without delay.

No.	Non-Compliance	Penalties	Specific Administrative Punishment of the Ministry
1	Failure or delay in timely submission of reports within period prescribed by Ministry	100 to 500 US\$ or equivalent Myanmar Kyat + 10-25 US\$ / day or equivalent Myanmar Kyat until cured	– Issue Enforcement Notice
2	Obstruction or interference with an official in the course of their duties	250 to 5,000 US\$ or equivalent Myanmar Kyat	– Issue Enforcement Notice – Criminal prosecution
3	Provide false or materially misleading information to the Ministry or any representative	1,000 to 5,000 US\$ or equivalent Myanmar Kyat	– Suspension of Approval of EMP, EMP-CP, EMP-OP in whole or in part – Revocation of Approval of EMP, EMP-CP, EMP-OP in whole or in part – Criminal prosecution
4	Failure to provide information to Ministry Inspector or any representative when requested in regard to inspection and monitoring	250 to 5,000 US\$ or equivalent Myanmar Kyat	– Issue Enforcement Notice
5	Operating/implementing without a permit, or approval by the Ministry of an EMP or EMP-CP/EMP-OP	1,000 to 5,000 US\$ or equivalent Myanmar Kyat + 50 to 500 US\$ / day or equivalent Myanmar	– Criminal prosecution

No.	Non-Compliance	Penalties	Specific Administrative Punishment of the Ministry
		Kyatuntil cured	
6	Non-compliance with an Enforcement Notice or Suspension Notice issued by the Ministry	2,000 to 10,000 US\$ or equivalent Myanmar Kyat + 100-500 US\$ / day or equivalent Myanmar Kyatuntil cured	<ul style="list-style-type: none"> <li>– Suspension of Approval of EMP, EMP-CP or EMP-OP in whole or in part</li> <li>– Revocation of Approval of EMP, EMP-CP or EMP-OP in whole or in part</li> </ul>
7	Failure to notify the Ministry of any knowledge of any event of an imminent threat of environmental damage	1,000 to 5,000 US\$ or equivalent Myanmar Kyat	<ul style="list-style-type: none"> <li>– Issue Enforcement Notice</li> <li>– Suspension of Approval of EMP, EMP-CP or EMP-OP in whole or in part</li> <li>– Revocation of Approval of EMP, EMP-CP or EMP-OP in whole or in part</li> </ul>
8	Failure to take reasonable steps to prevent an imminent threat of damage to the environment, social, human health, livelihoods, or property, where applicable based on the EMP, EMP-CP or EMP-OP	2,500 to 10,000 US\$ or equivalent Myanmar Kyat	<ul style="list-style-type: none"> <li>– Issue Enforcement Notice</li> <li>– Suspension of Approval of EMP, EMP-CP or EMP-OP in whole or in part</li> <li>– Revocation of Approval of EMP, EMP-CP or EMP-OP in whole or in part</li> </ul>
9	Failure to comply with conditions in the ECC and allowable Emission Limit Values	1,000 to 10,000 US\$ or equivalent Myanmar Kyat	<ul style="list-style-type: none"> <li>– Issue Enforcement Notice</li> <li>– Suspension of Approval of EMP, EMP-CP or EMP-OP in whole or in part</li> <li>– Revocation of Approval of EMP, EMP-CP or EMP-OP in whole or in part</li> </ul>



<b>No.</b>	<b>Non-Compliance</b>	<b>Penalties</b>	<b>Specific Administrative Punishment of the Ministry</b>
10	Failure to pay compensation amounts required in respect of social impacts	1,000 to 10,000 US\$ or equivalent Myanmar Kyat	<ul style="list-style-type: none"> <li>– Issue Enforcement Notice</li> <li>– Suspension of Approval of EMP, EMP-CP or EMP-OP in whole or in part</li> <li>– Revocation of Approval of EMP, EMP-CP or EMP-OP in whole or in part</li> </ul>
11	Failure to fully restore social conditions upon resettlement	1,000 to 10,000 US\$ or equivalent Myanmar Kyat	<ul style="list-style-type: none"> <li>– Issue Enforcement Notice</li> <li>– Suspension of Approval of EMP, EMP-CP or EMP-OP in whole or in part</li> <li>– Revocation of Approval of EMP, EMP-CP or EMP-OP in whole or in part</li> </ul>

Notes:

1. All penalty amounts set forth in this Annex are denominated in United States Dollars (US\$) and are subject to annual inflation adjustment
2. Abbreviations are as follows:
  - ECC = Environmental Compliance Certificate
  - EMP = Environmental Management Plan
  - EMP-CP = Environmental Management Plan - Construction Phase
  - EMP-OP = Environmental Management Plan - Operational Phase