

DOMESTIC ELECTRICAL INSTALLATION IN CAMEROON



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Title

1. Regulatory and institutional framework
2. Electricity Sector Statistics
3. Electrical Fire statistics
4. Regulatory control domestic electrical installations
5. Regulatory framework in imports of electrical equipment in
Cameroon

1. Regulatory and institutional framework

The overall objectives of the reform:

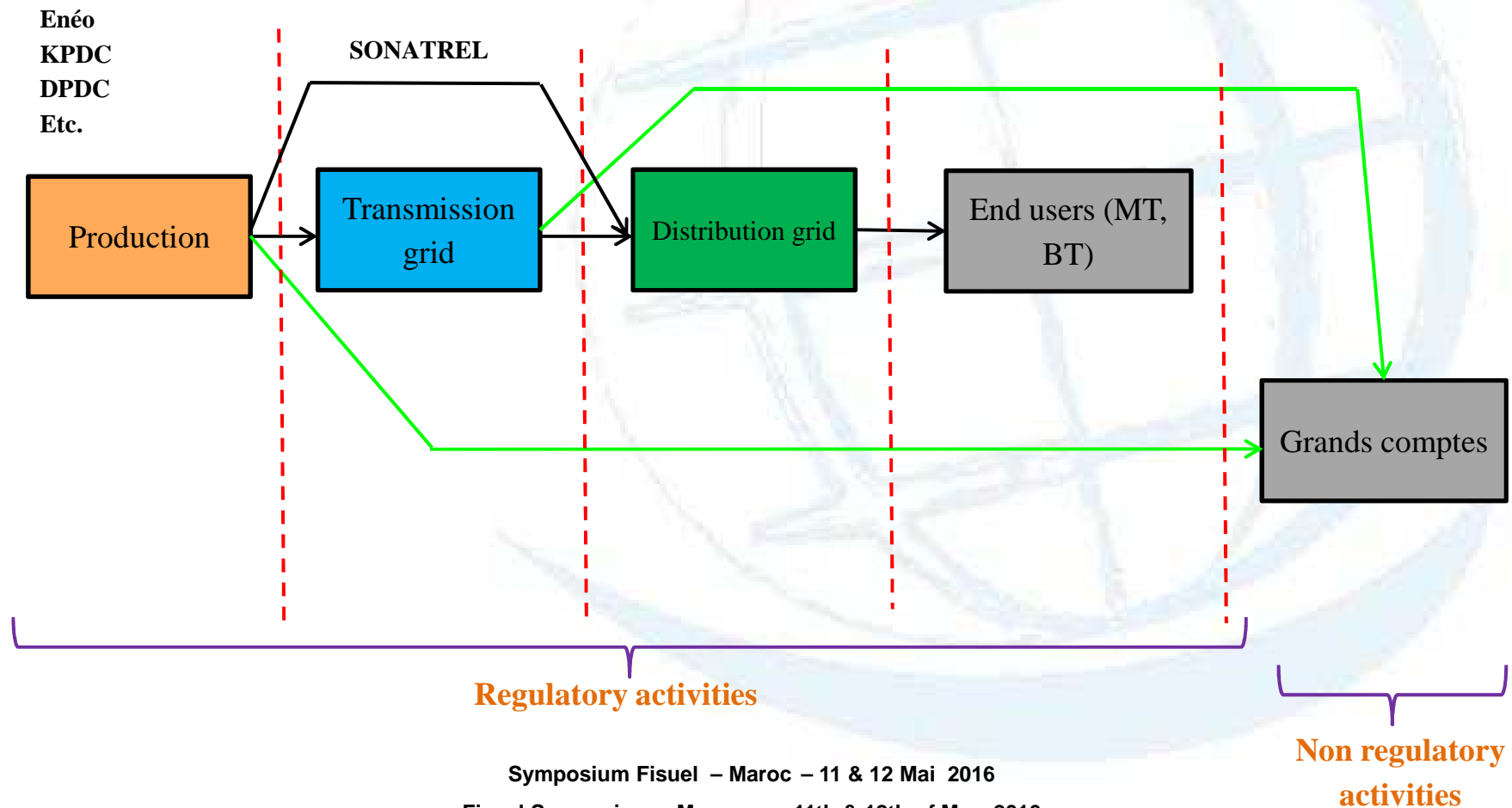
- disengage the State in the electricity market service
- reduce the financial burden on the sector from the state budget
- improve the contribution of the electricity sector in the economy and in the social development of the country

Actors in the electricity sector

- Ministry of Water Ressources and Energy (MINEE)
- Electricity Sector Regulatory Agency (ARSEL)
- Rural Electrification Agency (REA)
- Electricity Development Corporation (EDC)
- Société Nationale de Transport d'Electricité (SONATREL)
- ENEO-dealer Cameroon
- Kribi Power Development Company (KPDC)
- Dibamba Power Development Company (DPDC)
- HYDROMEKIN
- project MEMVE'ELE

1. Regulatory and institutional framework

A. Structure of electricity market in Cameroon



1. Regulatory and institutional framework

Electricity Sector Regulatory Agency (ARSEL)

The main activities of ARSEL are summarized in:

- economic and financial regulation;
- legal and regulatory control;
- technical regulation.

1. Economic and Financial regulation

- ✓ promoting healthy competition by determining the actual costs of projects and investments;
- ✓ calculation and application of a fair and equitable tariff;
- ✓ objective assessment of any compensation payable.

1. Regulatory and institutional framework

2. legal and regulatory control

- resolve disputes between Users on the one hand, and the operators of the other
- participate in the preparation of drafts of the sector
- study and assign legal systems operators
- apply the penalties provided by law

3. technical regulation

- monitor and control compliance by operators of the rules governing the exercise of activities in the electricity sector
- monitor compliance by operators of investment programs and obligations of service and quality of service
- monitor and control standards and performance standards by operators active development of generation, transmission and distribution of electric energy
- monitor compliance with the legislation on the protection of the environment

1. Regulatory and institutional framework

ARSEL is a member of:

- International Federation for the Safety of Electricity Users



- Energy Regulators Regional Association (ERRA)



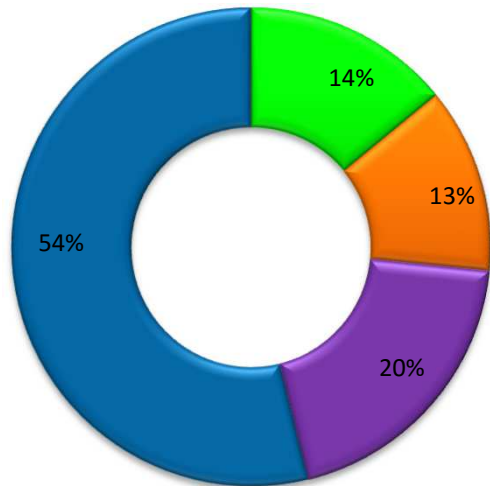
- African Forum Utility Regulator (AFUR)



2. Electricity Sector Statistics

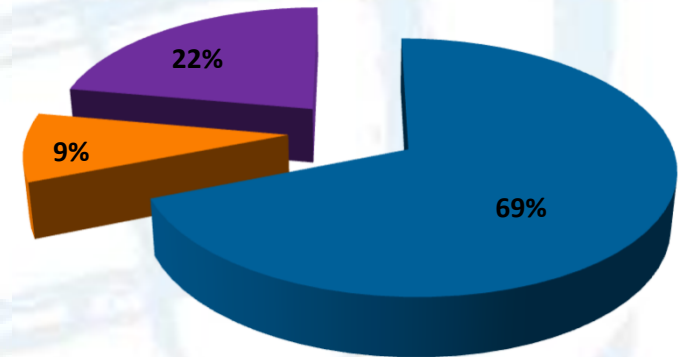
➤ Production (2015)

Install capacity: 1395 MW



■ Thermique HFO
■ Thermique Gaz
■ Thermique LFO
■ Hydroélectricité

Production: 6382387 GWh



■ Hydroélectricité ■ Thermique (HFO & LFO) ■ Thermique gaz

2. Electricity Sector Statistics

➤ Grid Segment



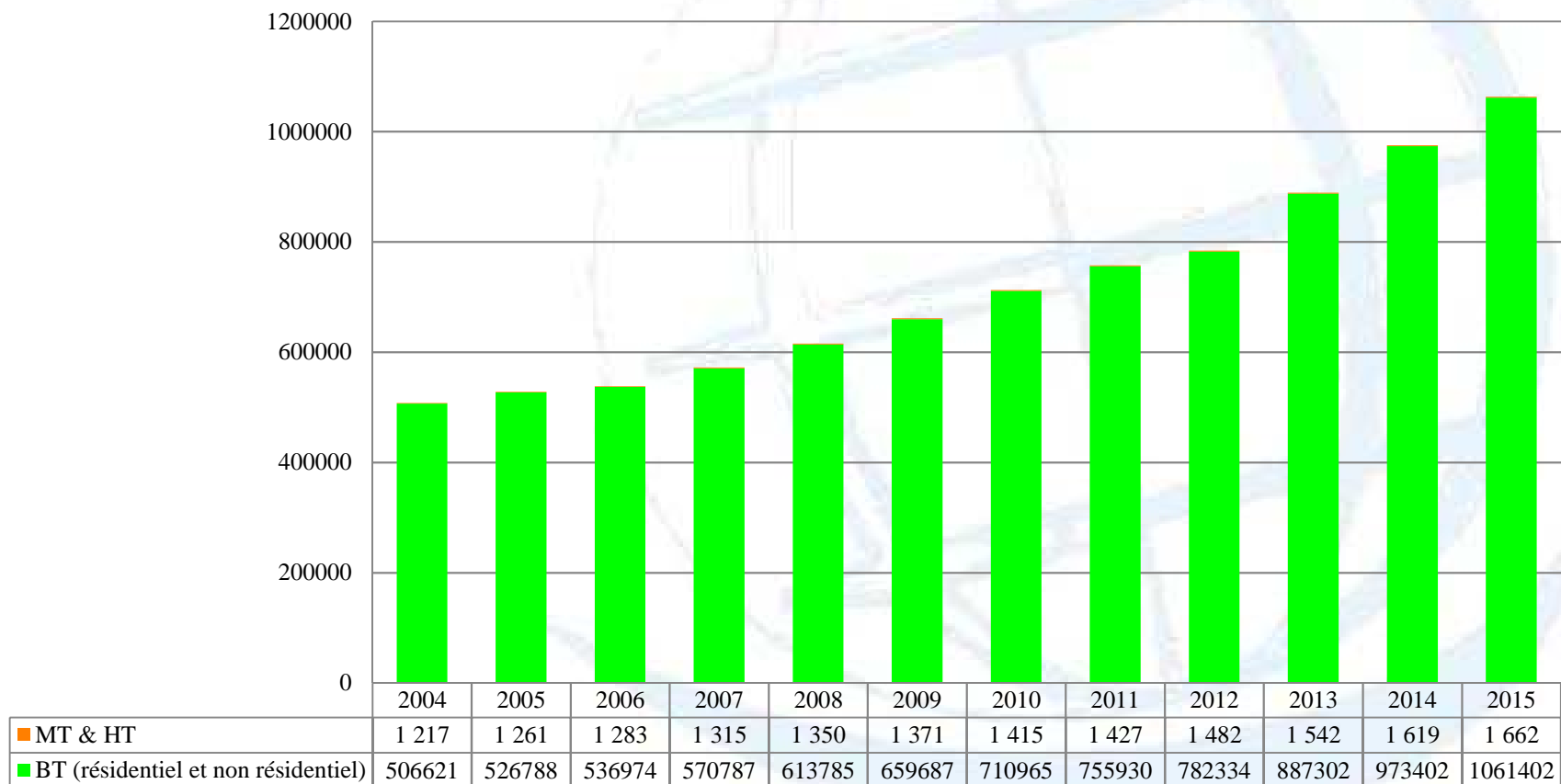
Transmission	Unit	Total 2014
Line 225 kV	km	792
Line 110 kV	km	338
Line 90 kV	km	1 102
Substation (HTB/HTB & HTB/HTA)	Number	31

Distribution	Unit	Total 2014
Line MT	km	16 785
Line BT	km	17 573
Area covered	km ²	475 442
Substation (HTA/HTA & MT/BT)	Number	8904



2. Electricity Sector Statistics

Electricity subscribers



3. Electrical Fire statistics

Main causes of electrical fires in Cameroon

- lightning and electrical short-circuit
 - *Less than 5% of homes are equipped with lightning protection*
 - *Nearly 10% of users do not have Residual current circuit breaker, and among those that do, 20% have no earth plug*
- Failure to follow the recommended safety standards
- The unsustainability of electrical installations
- the vandalisms
- Used of **counterfeit electrical equipment**



3. Electrical Fire statistics

Consequences:

- several economic losses estimated at billions of CFA francs annually
- casualties



3. Electrical Fire statistics

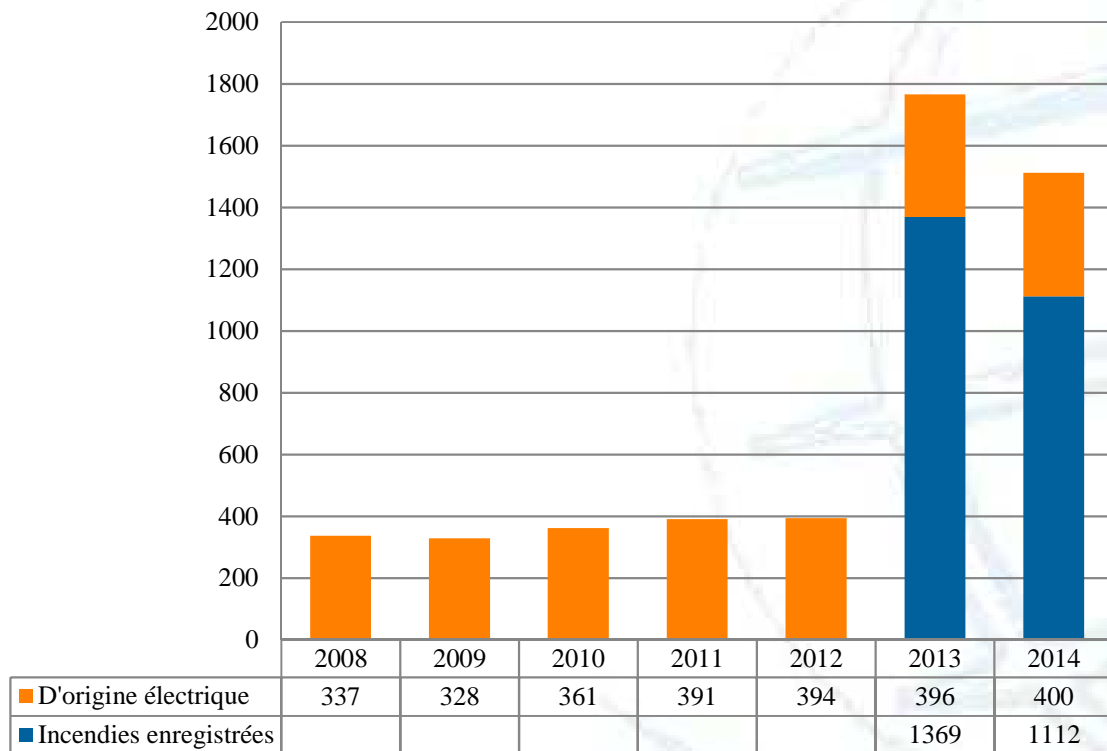


Fire in Ministry of public health



Fire destroy head quarter of Urban Community of Douala

3. Electrical fire statistics



Source: CNSP, 2014

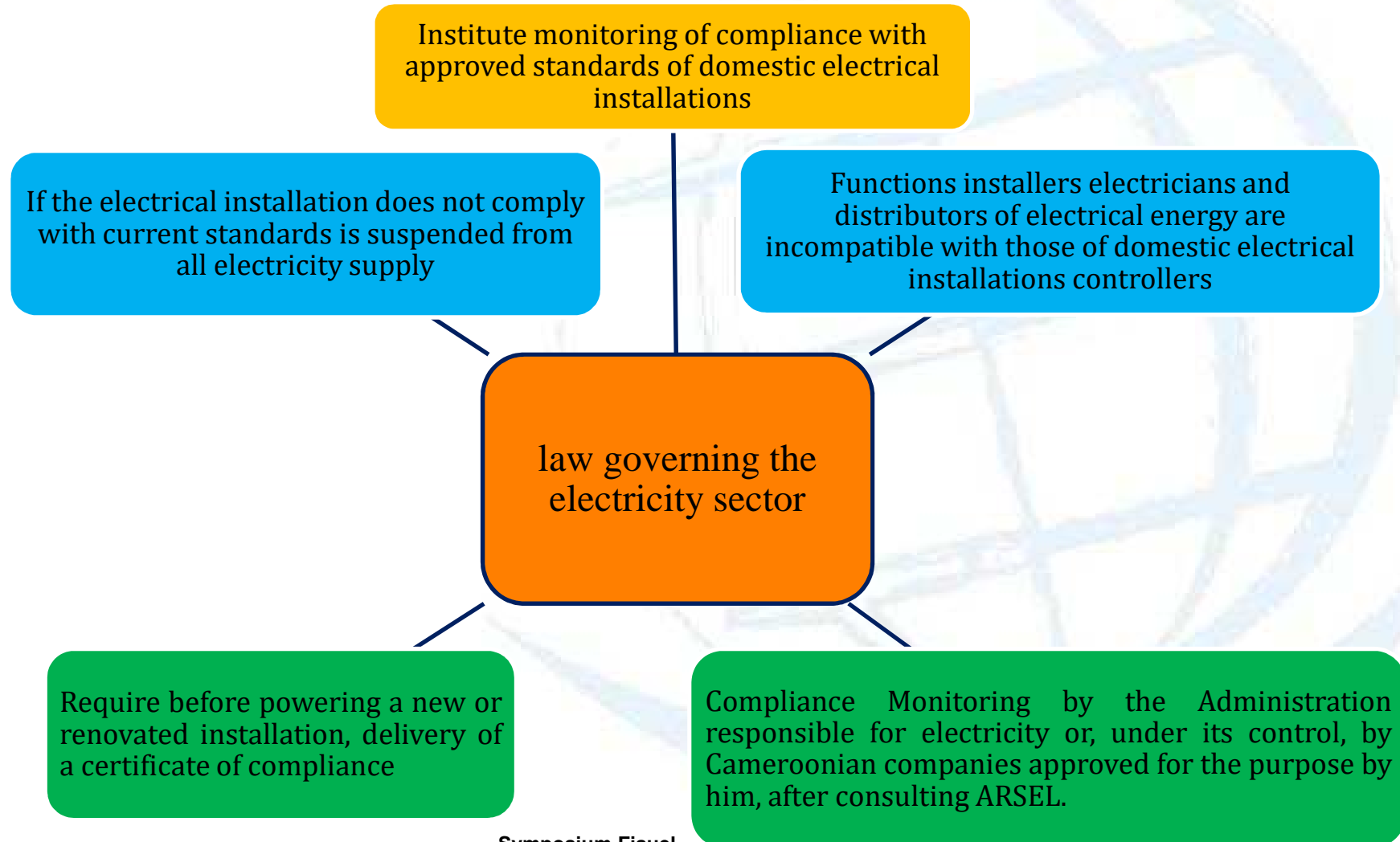


4. Regulatory control domestic electrical installations

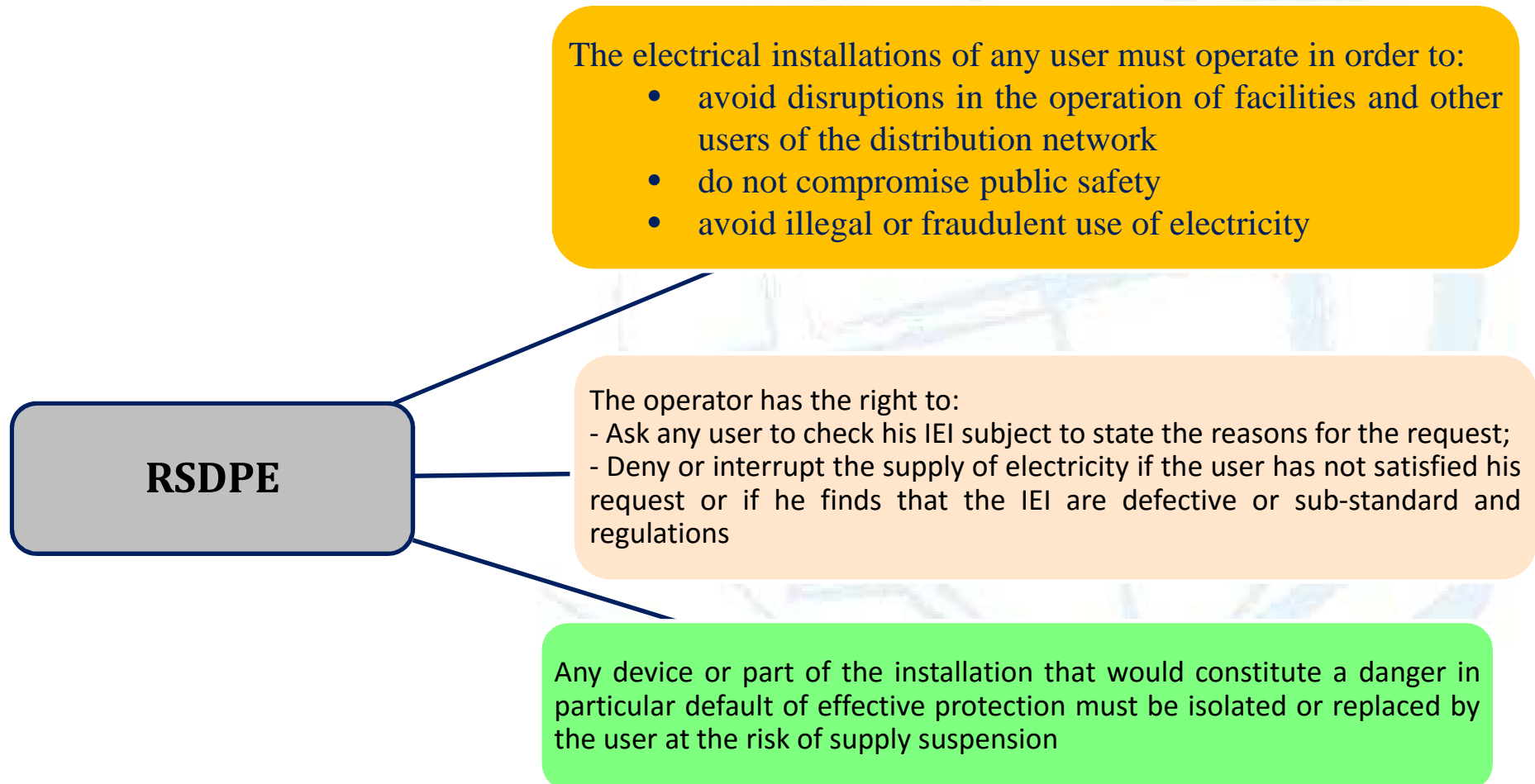
- Law n°2011/022 of 14 December 2011 governing the electricity sector
- Joint Order No. 002164 MINMIDT / MINEE of 20 June 2012 making mandatory the standard low voltage electrical installations NC 15100: 2011-08
- Regulation of the public electricity distribution service (RSDPE)
- Decree establishing the procedures for monitoring, control costs, and the conditions for approving the conformity of electrical installations and electrical equipment safety standards (ongoing)
- decision on the conditions for obtaining authorization and exercise of the profession electrician (ongoing)



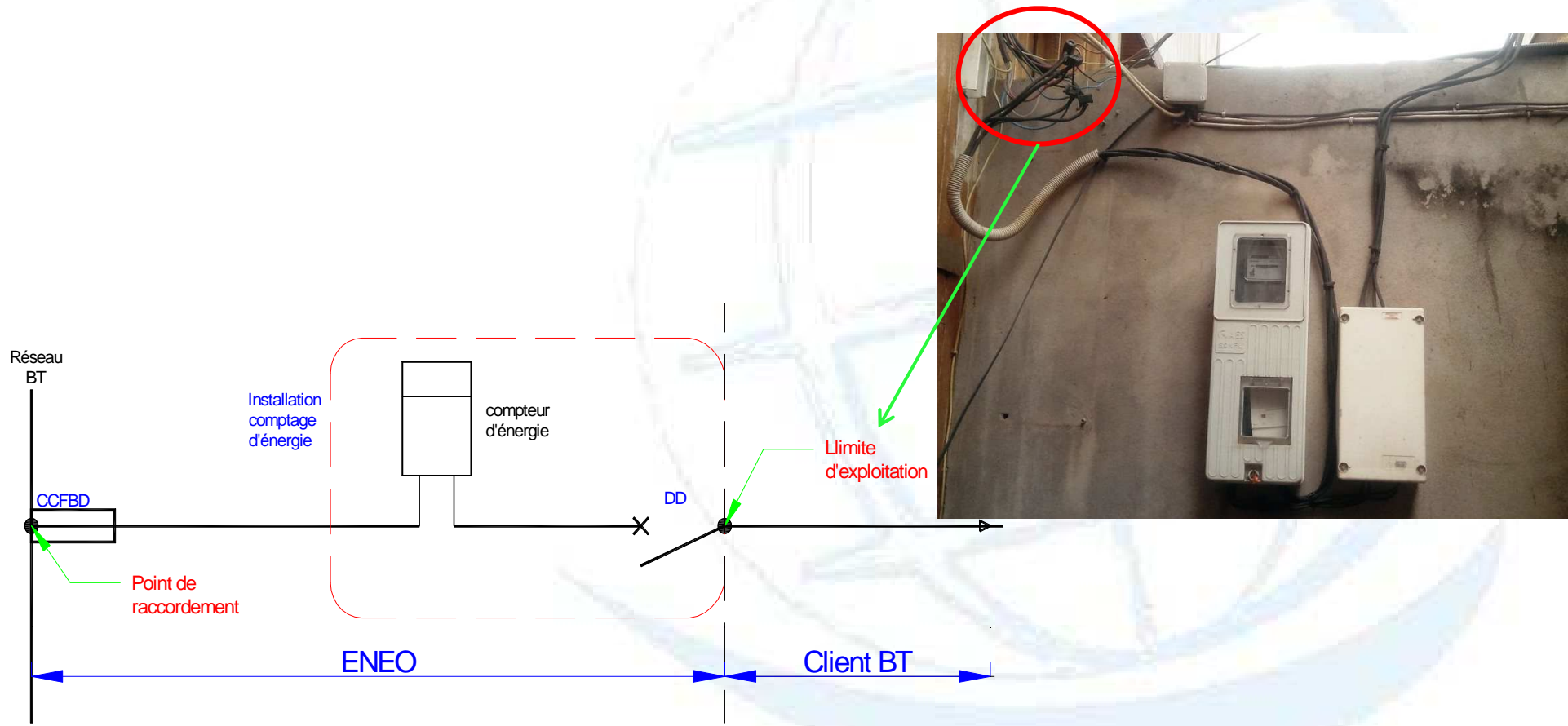
4. Regulatory control domestic electrical



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INSTALLATION CONNECTION LV

4. Regulatory control domestic electrical

CONTROL AND MAINTENANCE OF DOMESTIC ELECTRICAL INSTALLATION

MAINTENANCE RESPONSIBILITY:

- Concession: ENEO
- Private domain: Client

CONTROL :

- Low voltage installations: Installation Controller
- Medium-voltage installation:
 - ✓ Electrical equipment located before the operating limit to the commissioning
 - ✓ Electrical equipment in the MV / MV outside the operating limit the demand and the customer's expense
- consequences:
 - ✓ Electrical incidents
 - ✓ Disruption of power quality service

5. Regulatory framework in imports of electrical equipment in Cameroon

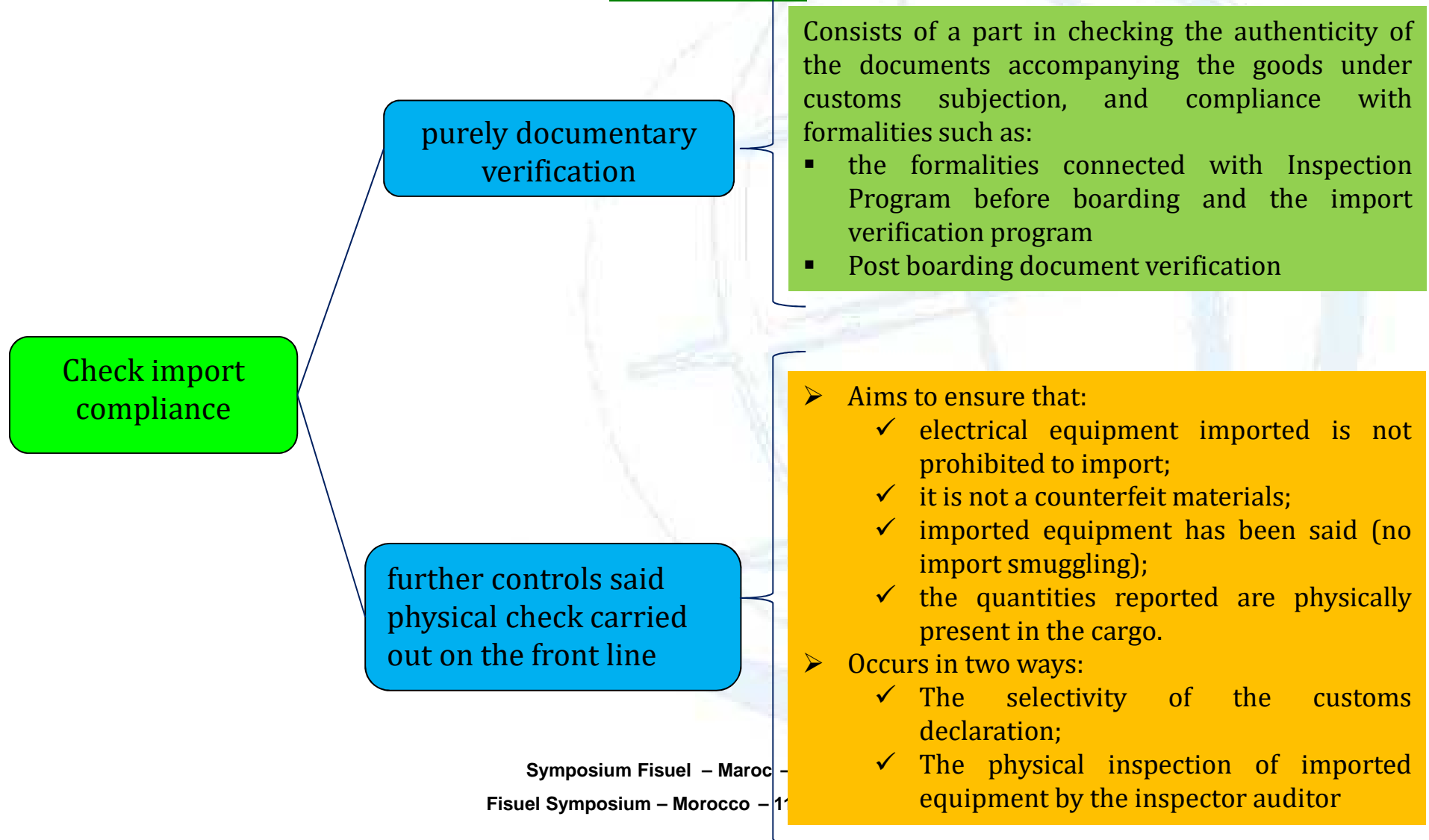
- Customs Code of the CEMAC
- customs Regulations
- Finance laws
- administrative texts

5. Regulatory framework in imports of electrical equipment in Cameroon

The importation of goods covered by the power sector and categorization of treatment on their exit from the customs subjection are closely linked:

- On the nature of the good
- Customs arrangements governing customs clearance mode thereon
- The status of the taxpayer that conducts import
- At the origin of the goods

5. Regulatory framework in imports of electrical equipment in Cameroon



THANK YOU

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