

# *CC - RfG implementation in Romania*



# TOPICS

1. Current situation;
2. RfG implementation:
  - Responsibilities;
  - Concept;
  - Process;
  - Schedule;
3. Transparency;
4. Particularities on HVDC & DCC implementation.

# 1. Current situation - Existing Codes

Transmission Grid  
Code  
(TSO)

Distribution Code  
(DSO)

One structure including :  
  
Requirements for  
generation connection  
  
Monitoring, etc.

One structure including :  
  
Link to  
Detailed requirements  
for connection  
etc.



RES integration

Specific  
requirements

NT 51/2009 requirements for  
wind power park connection  
NT 30/2013 requirements for  
photovoltaic power park  
connection

Technical  
aspects

Specific  
procedures

Order nr. 74/2013, modified  
by ANRE Order nr. 59/2014  
Notification and conformity  
tests procedure

(pilot)

Adoption  
Process

**Consultation:** Design &  
institutes, Stakeholders,

**NRA approval**

**European  
Commission  
submission – EU  
Directive 98/34/CE**

# 1. Current situation – CC implementation – early actions



- Contribution to Connection Codes' translations in Romanian language;
- Open debates/dialogue with stakeholders and DSOs - from 2013 TEL has promoted RfG draft terminology and provisions (CN CIGRE, National & Regional Conferences);
- Collaboration with Standardization Association (ASRO) for harmonization with national terminology and requirements;

# 2. RfG implementation - Responsibilities

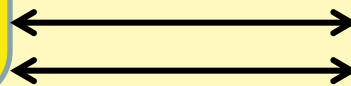
NRA (ANRE)  
process coordinator

TSO (Transelectrica)  
Grid Code administrator

ANRE site:

Transparency of the process  
Drafts  
Final document

Transparency



Transelectrica site:

Support documents, standards, actual technical norms & procedures  
Drafts  
Final document

Proposal of non exhaustive & detailed requirements  
Technical Norm & Procedure elaborator

Organization of meetings  
Involvement of: associations, stakeholders, organisations, DSOs

Meeting  
&  
Debates/dialogue

Respond to questions

Approval of Norms and Procedures – national level

CE submitting

Final adjustments  
Approval of Norms and Procedures

## 2. RfG implementation - Concept

EUROPEAN LAW: Network Code On Requirements For Grid Connection Of Generators

Romanian secondary regulatory framework – network codes

### Technical Norms :

- Non exhaustive requirements agreed at Continental Europe level (TSOs);
- Non exhaustive requirements approved at national level;
- Detail requirements.

### Procedures (Title III to VI):

- Operational notification procedure for connection;
- Compliance & tests ;
- Derogations;
- Emerging technologies.

**Internal TSO & DSO  
Procedures**

ONE GRID CODE

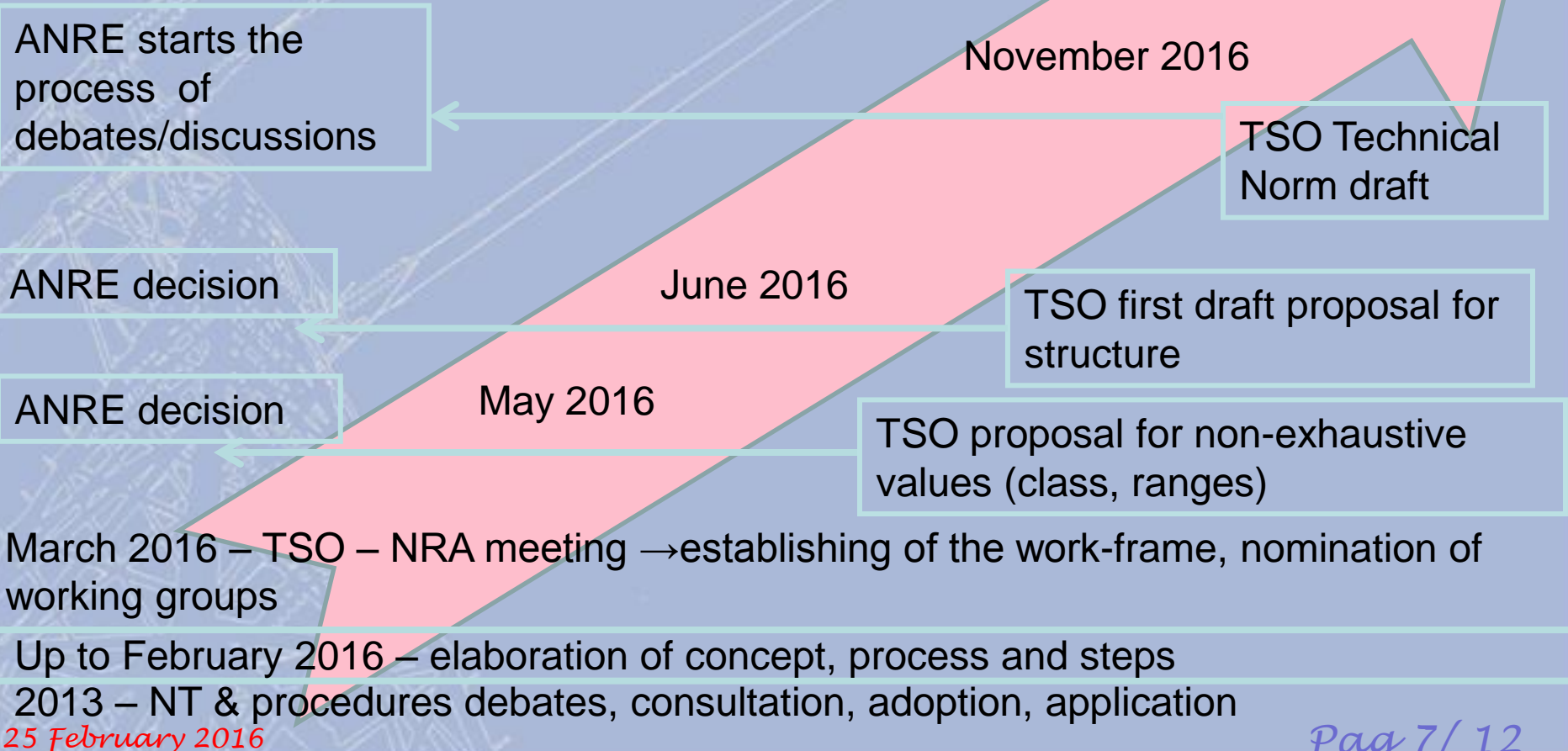
LAW,  
NORMS  
PROCEDURES

For each CC

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# 2. RfG implementation - Process





## 2. RfG implementation - action plan

- TSO-NRA analysis on implementation strategy: road-map, responsibilities;
- Meetings ANRE-TEL regarding proposal on requirements, time-table and necessary procedures - mid March;
- Transparency – publication on TEL web-site;

cod	sectiune	2016				2017				2018			
		Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
RfG	NT		proposals ,debats NRA-TEL	Elaboration		Consultation	Aproval	Sumission	final aproval				
	Procedures			Elaboration		Consultation	Aproval						
HVDC	NT		proposal s ,debats NRA-TEL	Elaboration		Consultation	Aproval	Sumission	final aproval				
	Procedures												
DCC	NT		proposals ,debats NRA-TEL	Elaboration		Consultation		Aproval	Sumission	final aproval			
	Procedures				Elaboration			Consultation	Aproval				



# 3. Transparency



- Publication of documents - TSO web-site:
  - NC RfG document,
  - Support documents: Norms & procedures in force, Standards presentations related to generators less than 1 MW – for DSO necessities,
- Consultation process:
  - Awareness: on ANRE & TEL web-site and media public releases;
  - Targeted areas: associations of generators, main producers, study & research institutes, ASRO, Universities, Manufacturers, DSOs.



## 4. Particularities on HVDC & DCC implementation

- HVDC
  - Technical norm will define non – exhaustive requirements as default values;
  - Procedures – will be elaborated in case of such users, if any;
- DCC
  - Will start with NRA-TSO-DSO consultation before establishing the framework and responsibilities between TSO and DSOs



# Status of process

- First analyze TSO-NRA on strategy of implementation regarding frame, time table, responsibilities;
- Next meeting ANRE- TEL regarding first proposal on requirements, time table and volume of procedures will be in the middle of Mach;
- Started the process of transparency – TEL site;

# Thank you !

