

ENTSO-E NEXT STEPS

ENTSO-E supports the CNC implementation

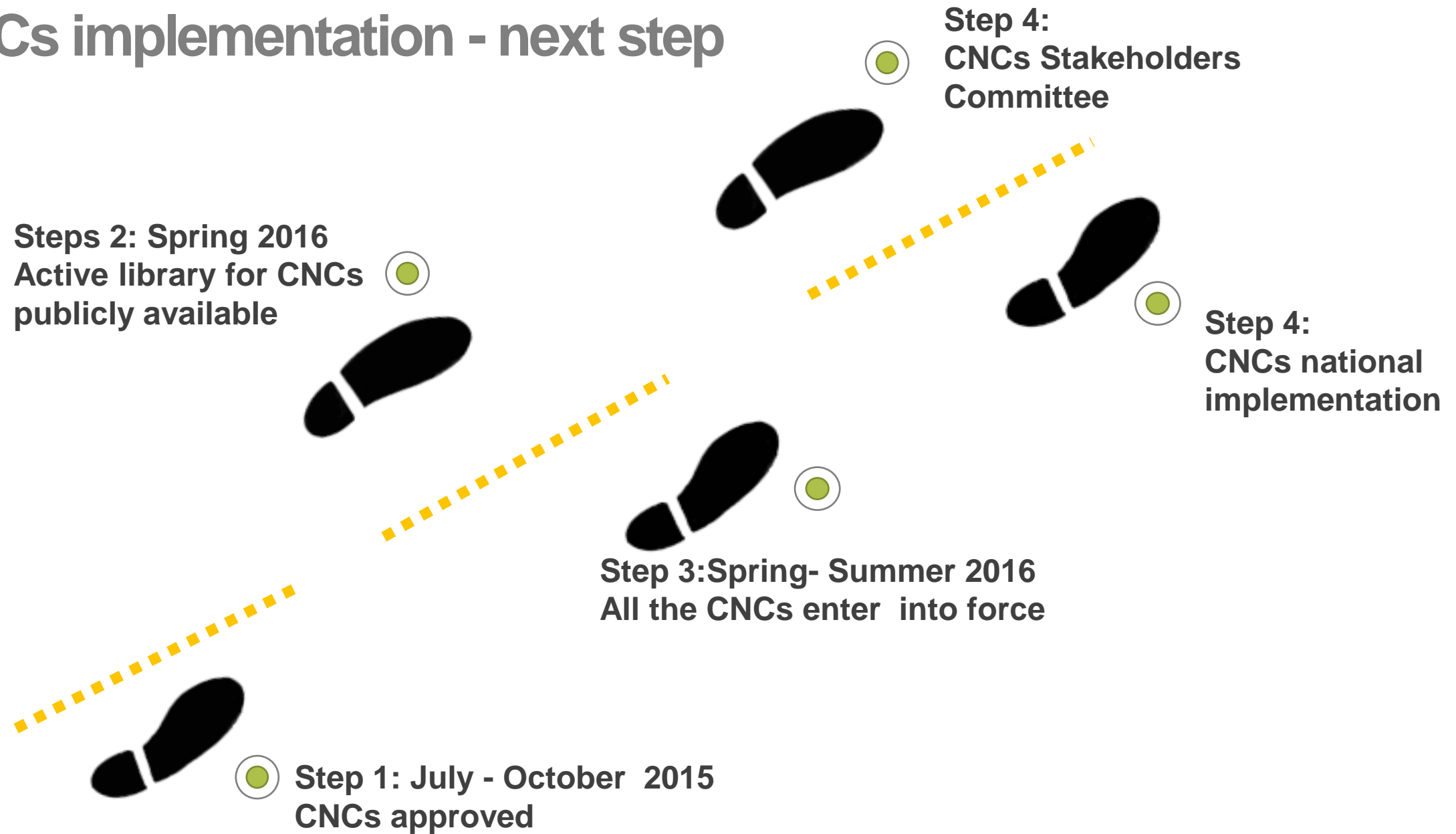
Irina Minciuna

**ENTSO-E's Workshop with
Stakeholders on the
Connection Network Codes
national implementation.**

25 February 2016

Vienna

CNCs implementation - next step



ENTSO-E roles regarding the CNCs implementation

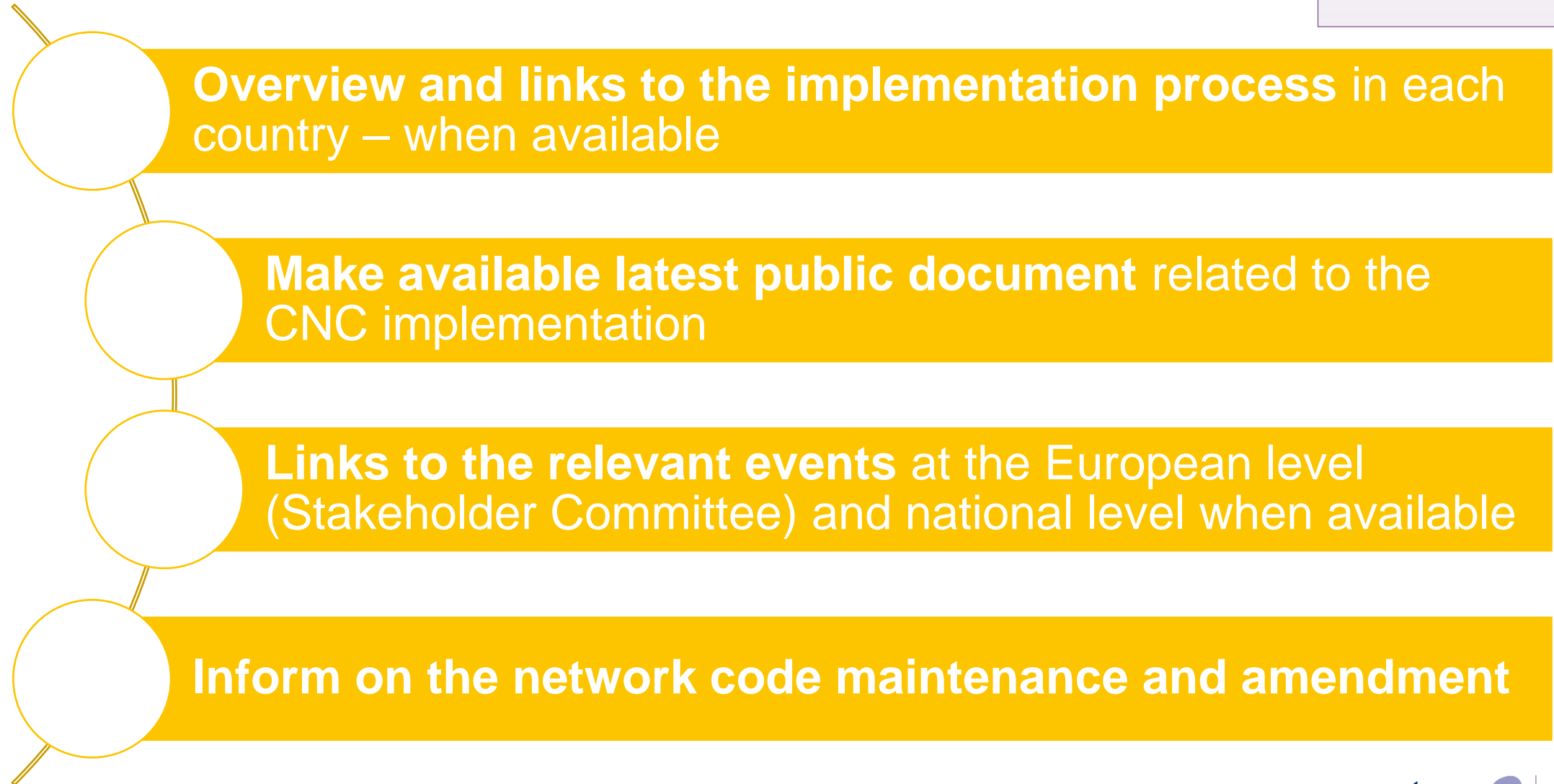
**ENTSO-E
informs**

**ENTSO-E
guides**

**ENTSO-E
monitors**

ENTSO-E supports the CNCs implementation (I) – external information platform (Active Library)

ENTSO-E
informs



ENTSO-E supports the CNCs implementation (II)

- internal communication platform for all the TSOs

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informs



Enhances the exchange of experience among 34 countries implementation codes TSOs responsible

Builds the library of best practices to share between all the TSOs

Deliver guidelines and examples for supporting the TSOs in the implementation process

ENTSO-E supports the CNC implementation - implementation guidelines

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guides

- Surveyed Stakeholder opinions on Guidance topics – Dec/Jan
- Will listen to Stakeholders in Workshop 28 February for desired content for each of 20 selected Guidance topics.
- Plan to deliver final guidance within the 6 months stipulated following further consultation in June and internal sign-off.

Rate-of-change-of-frequency withstand capability -

Frequency related parameters for non-exhaustive requirements -

Need for Synthetic Inertia for frequency regulation -

Interactions between HVDC controllers -

General guidance on parameters for non-exhaustive requirements -

Determination of the thresholds for Types B, C & D power generating modules -

Guidance on making non-mandatory requirements at European level mandatory at national level

Special issues for Type A -

Voltage related parameters for non-exhaustive requirements -

Reactive power requirement for PPMs & HVDC converters at low / zero active power -

Reactive power on TSO-DSO interface -

Voltage stability in a converter dominated system

Post fault active power recovery -

System restoration requirements -

Fault current contribution from PPMs & HVDC converters -

Real time data & communications including redundancy.

Harmonisation

Guidance on compliance, test and monitoring -

General guidance on CBAs -

Instruments, simulation, models & protection for non-exhaustive requirements -

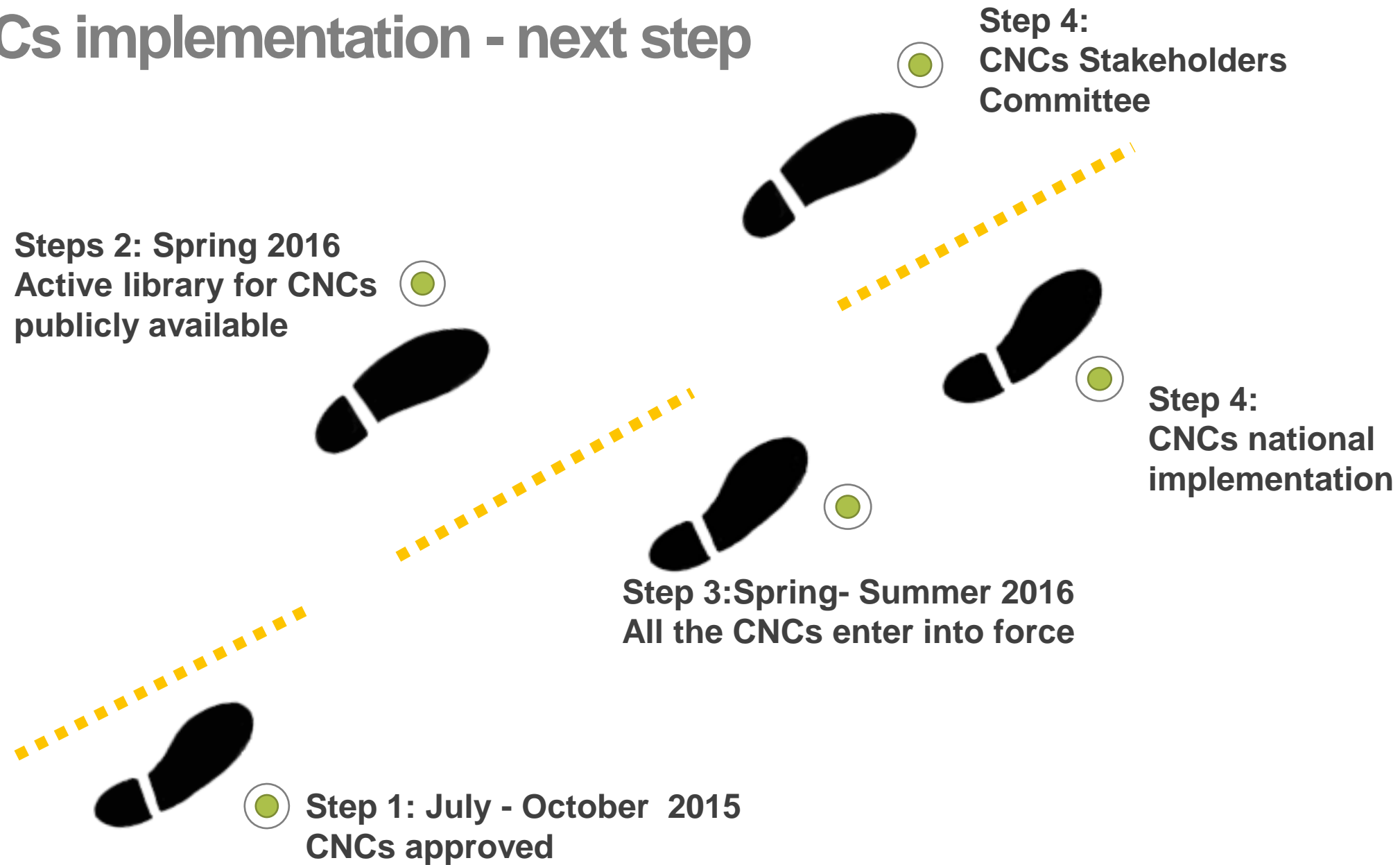
ENTSO-E supports the CNC implementation

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monitors

Together with ACER ENTSO-E will monitor and enhance the Connection Codes implementation for the years to come

- Timelines still to be defined
- Level of monitoring by ACER and ENTSO-E to be refined
- Stakeholders Committee on its way -> First meeting: 18 March 2016

CNCs implementation - next step



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Reliable Sustainable Connected