



## *Challenges to European Security: A Transatlantic Perspective*

### **Valeria Termini**

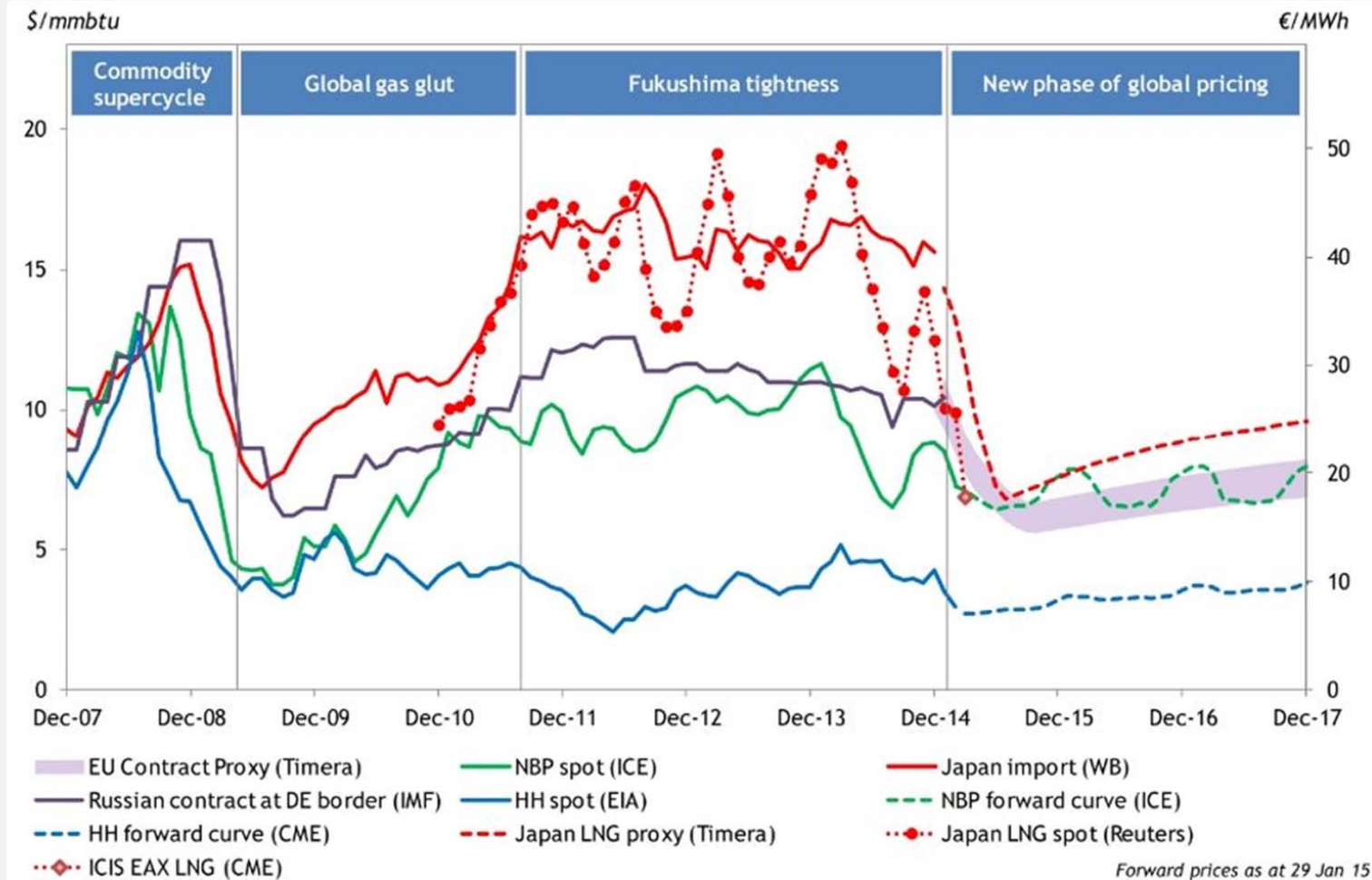
Commissioner of the Italian Regulatory Authority for Electricity Gas and Water

Vice-President of the Council of European Energy Regulators

Professor of Economics, University of Roma Tre



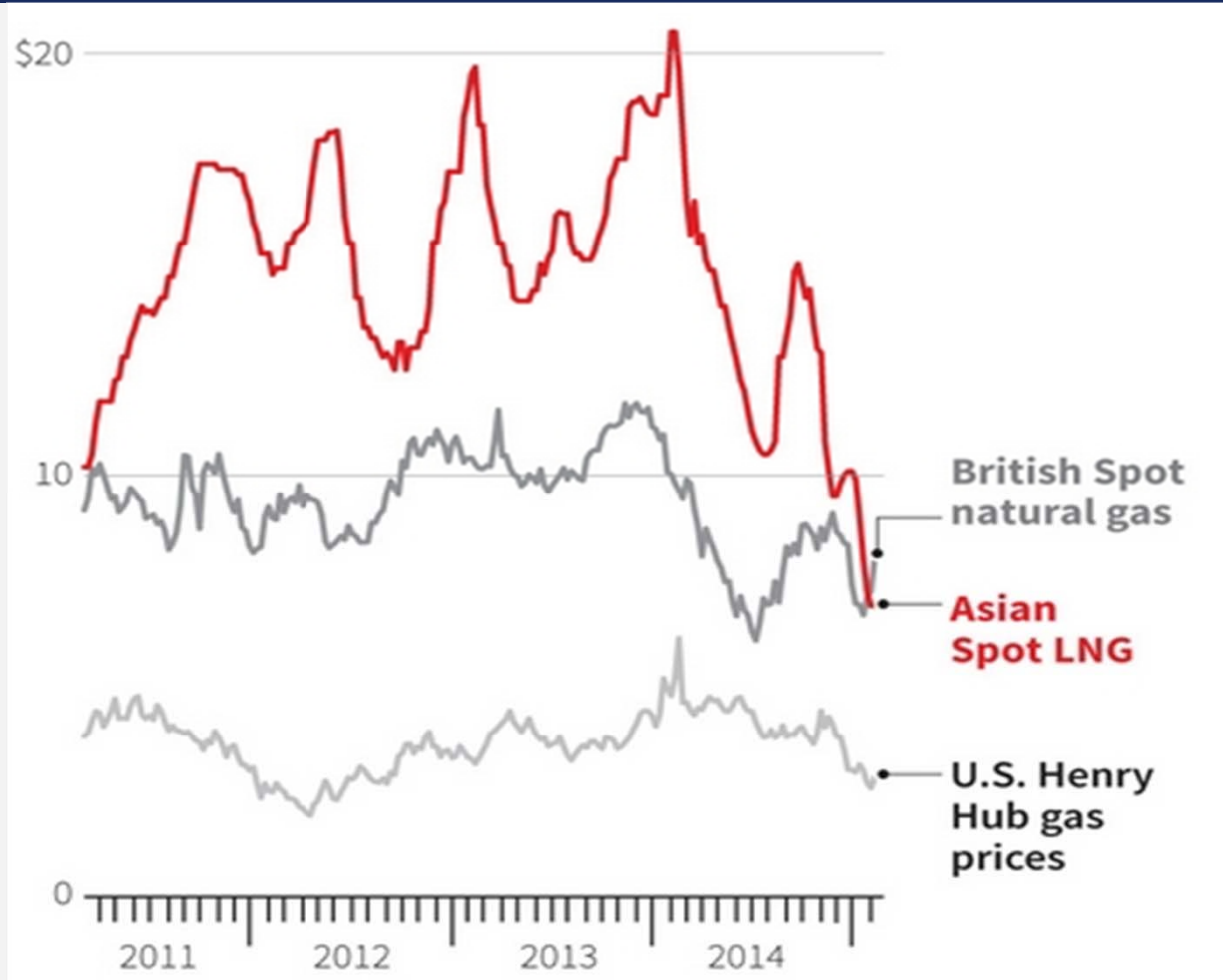
## European gas pricing in a global context



Source: Timera Energy



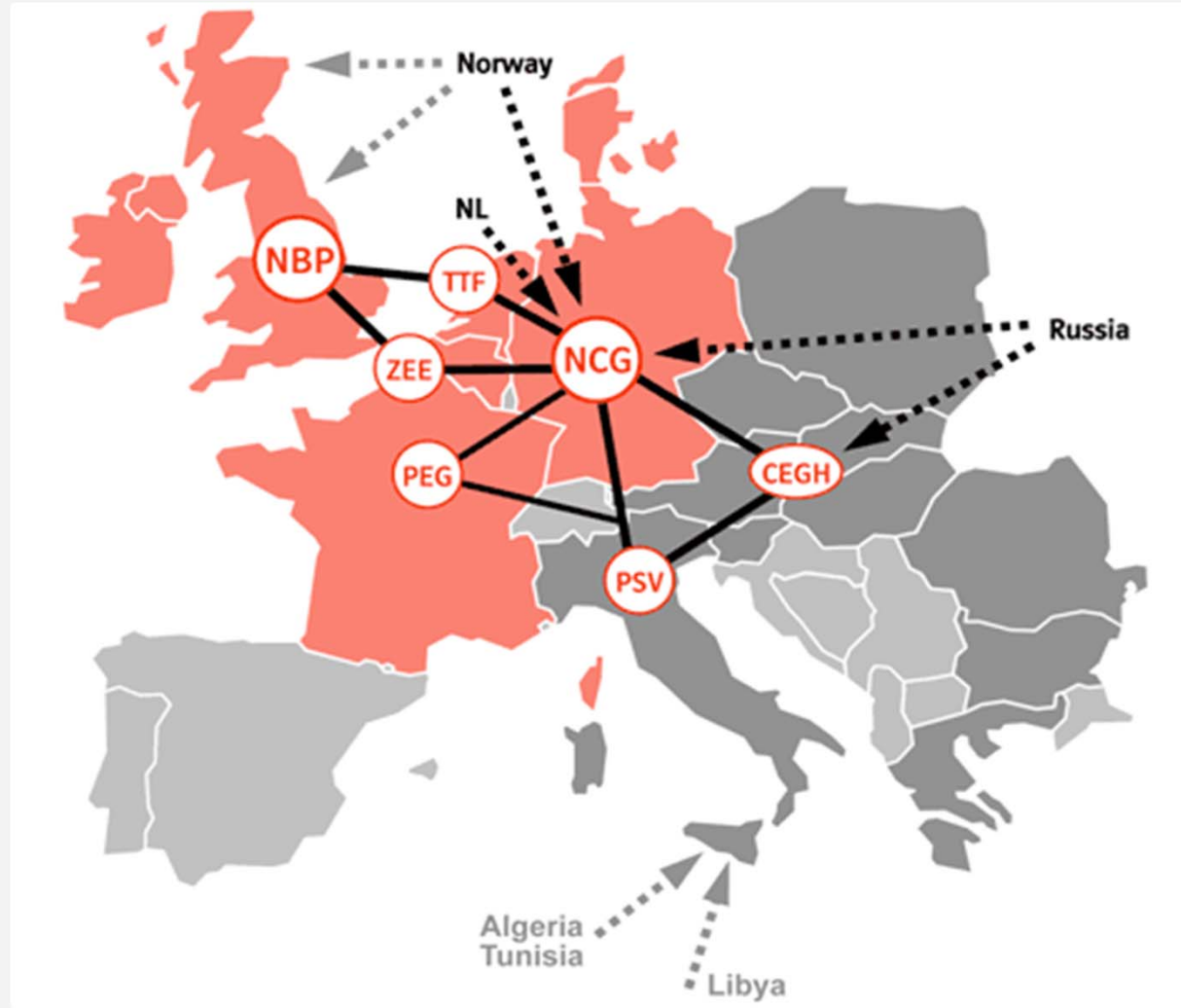
## European spot LNG vs Asian and US hub prices



Source: Reuters; \$/mmbtu



## European gas hubs



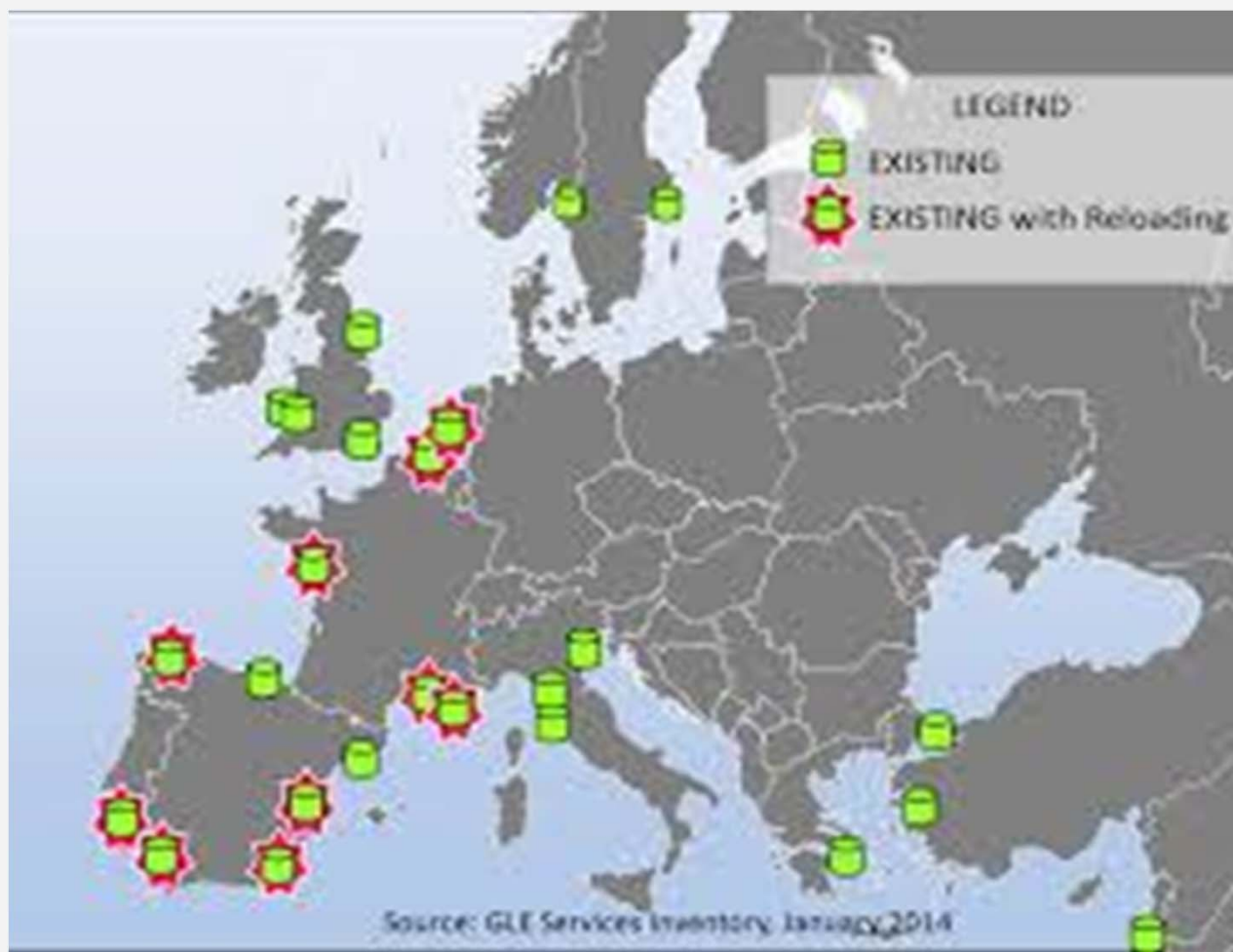
NBP – National balancing point  
TTF – Title Transfer Facility  
ZEE – Zeebrugge Platform  
PEG – Gas Exchange Point  
NCG – NetConnect Germany  
PSV – Punto di Scambio Virtuale  
CEGH- Central European gas Hub



# Gas Infrastructure Europe



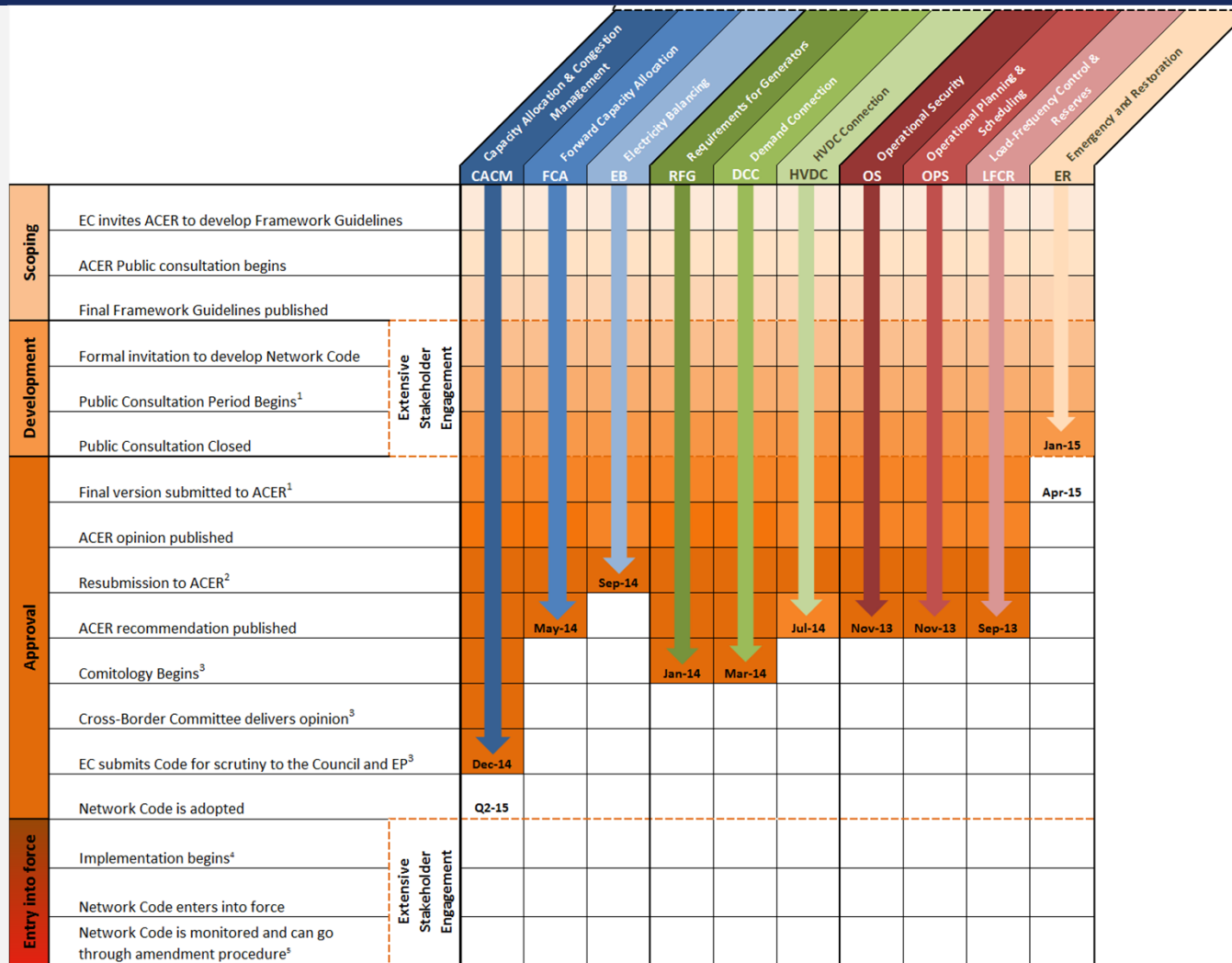
## LNG import terminals offering reloading



Source: GLE Services Inventory, March 2015



# Status of Network Codes









## Gas Infrastructure Europe

[http://www.gie.eu/download/maps/2015/GIE\\_LNG\\_2015\\_A0\\_1189x841\\_FULL\\_wINFOGRAPHICS\\_FINAL.pdf](http://www.gie.eu/download/maps/2015/GIE_LNG_2015_A0_1189x841_FULL_wINFOGRAPHICS_FINAL.pdf)





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Thank you for your attention



## Appendix

## Russian gas transit through Ukraine to Europe countries, bcm

	2013	2012
Italy	25.33	15.08
Turkey	13	14.02
Germany	11.71	21
Czech Republic	7.32	7.28
Hungary	6	5.29
Slovakia	5.42	4.19
Austria	5.23	5.22
France	3.21	3.04
Bulgaria	2.76	2.53
Greece	2.63	2.5
Romania	1.19	2.17
Serbia	1.16	0.74
Slovenia	0.54	0.5
Switzerland	0.37	0.3
Bosnia-Herzegovina	0.19	0.26
Macedonia	0.04	0.08
<b>Total</b>	<b>86.1</b>	<b>84.2</b>

Sources: Gazpromexport, Ukrtransgaz, Argus estimates in Argus FSU, 27 February 2014, Defensive measures,