



EU 10/100/20: critical issues for the Manufacturing Supply Chain

Alain ASTIER
STMicroelectronics
**Front-End Manufacturing
& Technology R&D**
Group Vice President
Strategic Planning & Programs



SEMI Brussels Forum
June 3rd, 2014

EU 10/100/20: critical issues for the Manufacturing Supply Chain

2



Mobilization



Environment



Business



Manufacturing



Focus



Conclusion

EU 10/100/20: critical issues for the Manufacturing Supply Chain

3



Mobilization

Environment

Business

Manufacturing

Focus

Conclusion

EU 10/100/20: critical issues for the Manufacturing Supply Chain

1) *Full Scale Mobilization*

- European Commission has provided a fantastic vision and challenge
 - 10/100/20 has not yet got the same resonance as KET initiative
 - ELG paper is a good working document with an action program
 - Only a very few Organizations, as SEMI Europe, are relaying the message
 - The whole Supply Chain has not yet been fully mobilized
-
- To put 10/100/20 in the Agenda of top European Conferences/Events...
 - To insure coherence between KET initiative and 10/100/20 strategy
 - To increase attention to 10/100/20 across all Actors via cross-organizational workshops organized by DG CONNECT, around specific strategic thematic
 - Top Players of the Supply Chain: to regularly communicate on the matter

EU 10/100/20: critical issues for the Manufacturing Supply Chain

5



Mobilization



Environment



Business



Manufacturing



Focus



Conclusion

EU 10/100/20: critical issues for the Manufacturing Supply Chain

2) *Flexible Environment*

- Competition is out of Europe: to be understood by all Authorities (R,N,E)
- Too many regulations, too much legally constrained Environment
- Speed for political decisions about Microelectronics is slow in Europe
- Sense of survival versus Competition not yet in the European mindset

- To support/encourage/fund cross-border cooperation
- To support/encourage/fund inter-cluster cooperation
- To speed-up/simplify European checks by DG COMPETITION
- DG CONNECT: to organize specific workshops with other DG's and Supply Chain Actors for addressing roadblocks in the implementation of 10/100/20

EU 10/100/20: critical issues for the Manufacturing Supply Chain



Mobilization



Environment



Business



Manufacturing



Focus



Conclusion

EU 10/100/20: critical issues for the Manufacturing Supply Chain

3) *European Business*

- Systems, Applications are part of the value chain (Cf ELG Report)
 - Chips are contributing to Innovation, Security, Cost ... of solutions to European Societal needs
 - Most of the chips used in Europe are not produced in Europe
 - Key European markets (Automotive, Health, Transport...) should find solutions in Europe
-
- To focus Business on Strengths (internal company+european ecosystem) to get and to keep WW leadership
 - To increase business synergies between Actors of Supply Chain
 - EU to organize workshops about business strategies with Systems Companies around European societal needs (ECSEL ?)

EU 10/100/20: critical issues for the Manufacturing Supply Chain



Mobilization



Environment



Business



Manufacturing



Focus



Conclusion

4) Support to Manufacturing

- Excellent progress from KET : support up-to Pilot Line level
 - R&D will not survive in Europe without a strong Manufacturing in Europe
 - Manufacturing is not supported in Europe as it is in Asia and Americas
 - Manufacturing is providing Jobs and Careers
 - Manufacturing is requiring Skilled and Motivated Engineers
- Europe needs an Industrial Policy; Manufacturing to be in the Agenda of EU
 - To fund Manufacturing Projects: not only new Fabs but also Improvement of existing Fabs (as in other WW Regions)
 - To support Universities and Engineering Schools for developing Skills in Manufacturing Science and attracting Students to Industry

EU 10/100/20: critical issues for the Manufacturing Supply Chain



- Mobilization
- Environment
- Business
- Manufacturing
- **Focus**
- Conclusion

5) Focus on Regional Excellence Centers

- Microelectronics is growing in the world only within large Regional Ecosystems
 - Regional Clusters are Centers for Excellence with shared business vision
 - In Europe, Clusters are many, only a few ones have competitive dimension of scale
 - Cluster Members are from SME's at 80% or more
 - Clusters are at the Heart of the Smart Regionalisation of the Regions
-
- EU and all Initiatives (KET, 10/100/20, ELG,...) should support Clusters as key Actors of the European Ecosystem : no success of EU 10/100/20 implementation without competitive Clusters and prosperous SME's
 - We need a strong European Cluster Policy, supporting competitive Clusters and their cooperation, organizing the Smart Specialization of the Regions

EU 10/100/20: critical issues for the Manufacturing Supply Chain



Mobilization

Environment

Business

Manufacturing

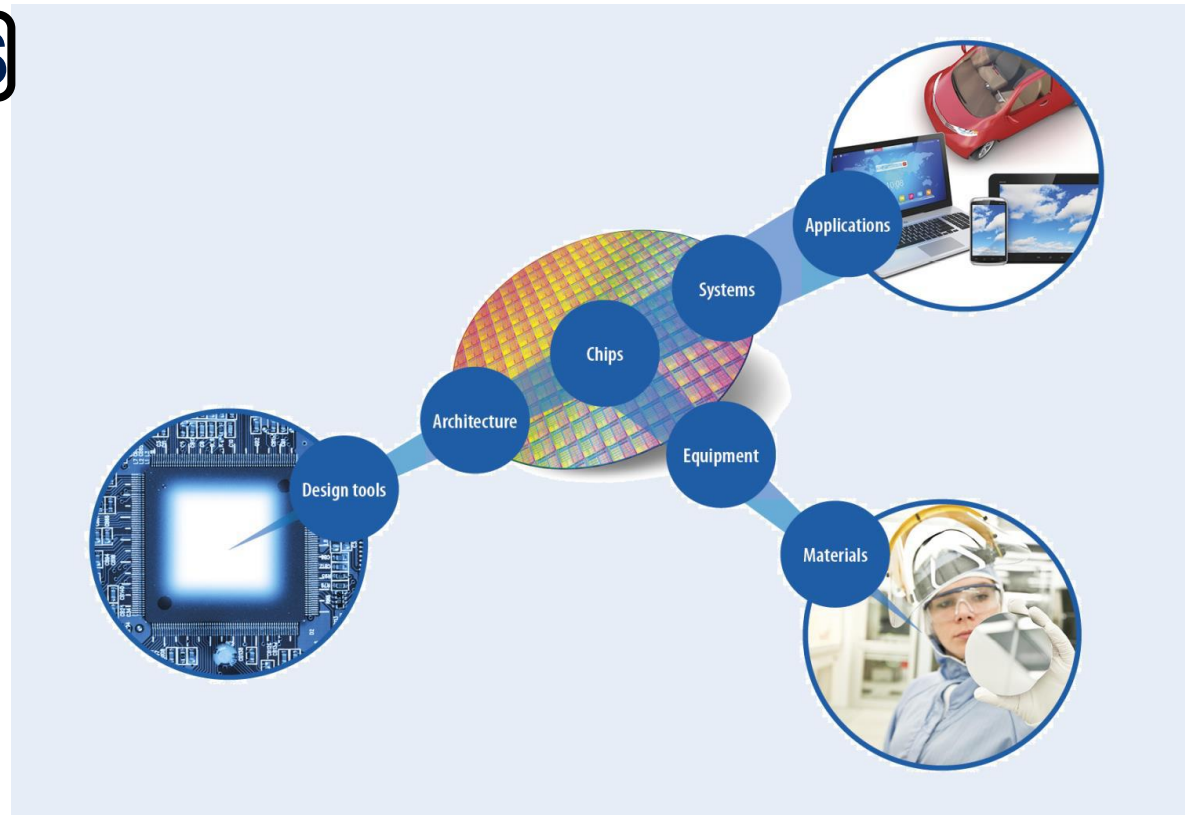
Focus

Conclusion

The two Dimensions of the Microelectronics Industry

1-BUSINESS

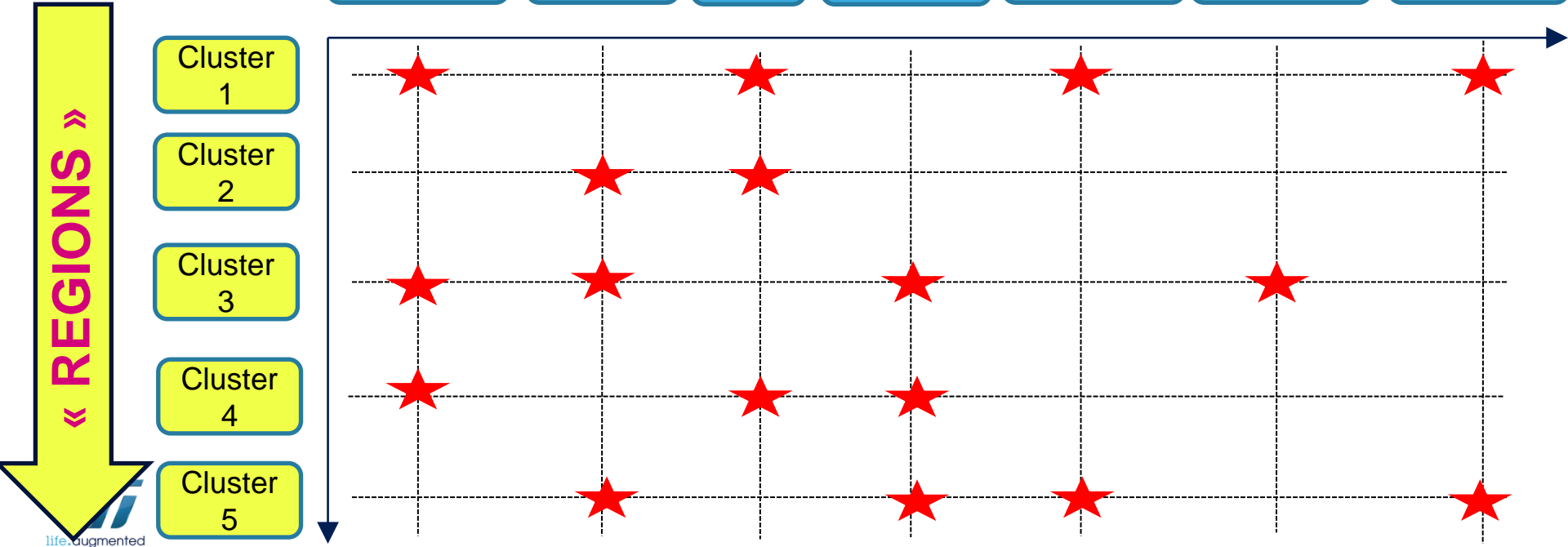
(cf ELG)



EU 10/100/20: critical issues for the Manufacturing Supply Chain

The two Dimensions of the Microelectronics Industry

2- ECOSYSTEM



EU 10/100/20:
critical issues
for the Manufacturing Supply Chain

16

The two Dimensions of the Microelectronics Industry

“BUSINESS” and “ECOSYSTEM”

**WE WILL SUCCEED ONLY
IF THESE TWO DIMENSIONS
ARE CONSIDERED WITH THE SAME PRIORITIES**



THANK YOU

Alain ASTIER
STMicroelectronics
Front-End Manufacturing
& Technology R&D
Group Vice President
Strategic Planning & Programs



SEMI Brussels Forum
June 3rd, 2014