



 **REGIONE CAMPANIA**



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Dario Aponte

FreeMed Project– *New mobility scenarios in the Free trade zone in the Mediterranean basin*

Athens, October 30th 2008



Campania's Agency for the Promotion of Logistics and Goods Transport S.C.p.A

Is a private-public Agency, founded in 2004 by initiative of Transport Councillorship of Campania.

The mission of LOGICA is to promote Campania as excellent territory as the logistic and goods transport on the National and International level.

Logica's Partners



Athens, October 30th 2008

The FREEMED project

An INTERREG IIIC ARCHIMED funded project aiming at evaluating the transport effects of the Free Trade Zone under the EMFTA agreements.

Research team:

- ✓ EAV (on behalf of Regione Campania) *leading partner*
- ✓ National Technical University of Athens (NTUA)
- ✓ Regione Calabria
- ✓ ADEP
- ✓ CERTH/HIT

FREEMED background

- ✓ Enhancement of *short-sea shipping* (SSS) connections within the Mediterranean as a key topic in transport planning both at a national and at a EU-level
- ✓ Explicit reference to SSS based TEN-T networks:
 - ✓ Baltic Sea
 - ✓ Western Europe
 - ✓ South-Eastern Europe
 - ✓ South-Western Europe and Black Sea
- ✓ Increase in freight flows both in consolidated markets in concurrence with all-road alternatives (e.g. Italy-Spain routes) and in new markets (e.g. Black Sea, EMFTA and so on)
- ✓ Need for DSS and models in the viewpoint of:
 - ✓ Shipping companies
 - ✓ Port authorities and planning bodies

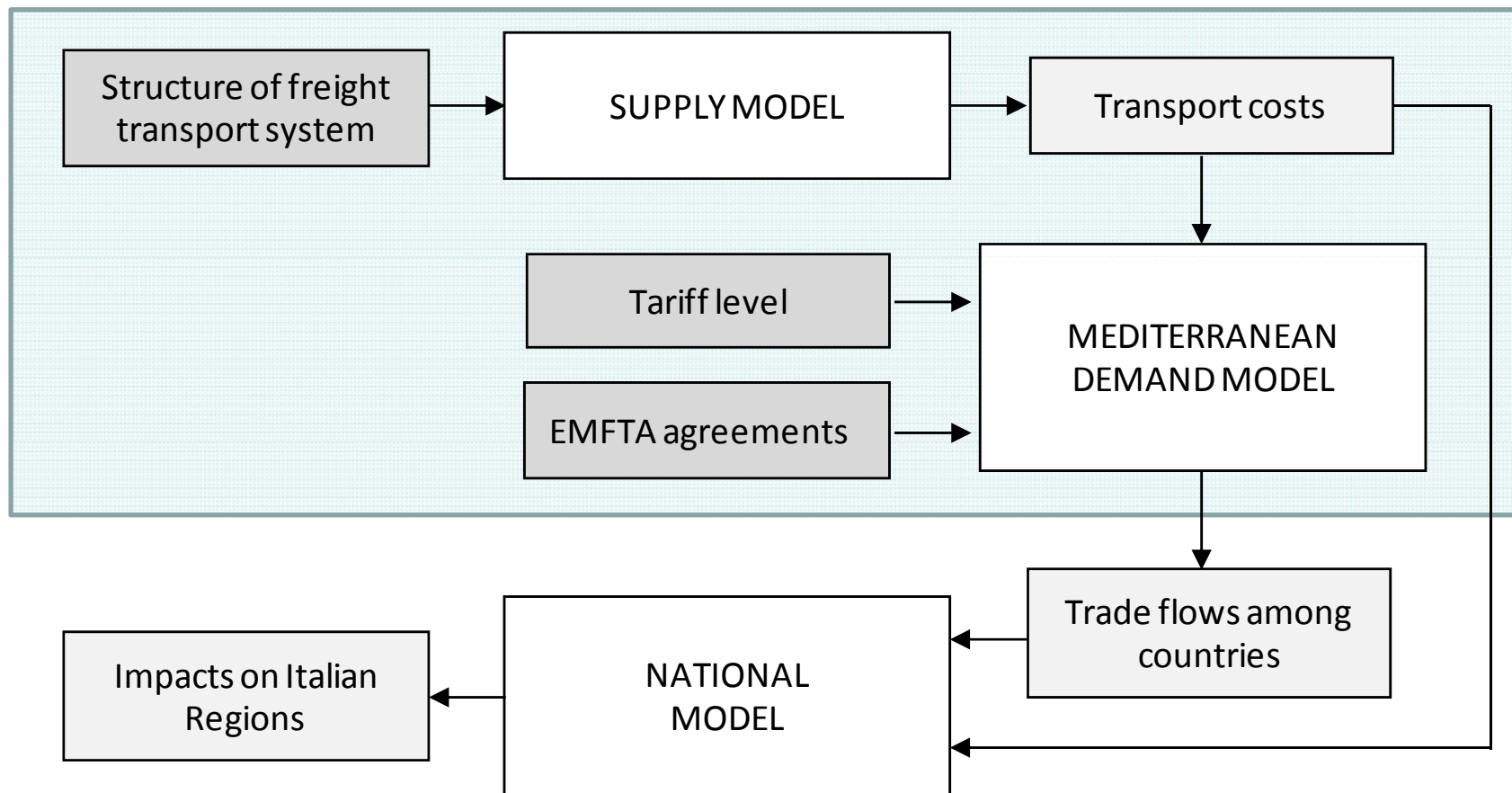
The FREEMED project

Macroactivities:

- ✓ detailed analysis of current trade structure and agreements pattern
- ✓ implementation of a DSS for quantitative appraisal of EMFTA impacts on transport
 - Euro-Mediterranean supply model (rail, road and maritime transport modes)
 - Euro-Mediterranean demand model (20 zones, 49 countries, 5 commodity classes)
- ✓ appraisal of EMFTA scenarios
 - overall impact on international trade flows
 - assessment of national impacts
 - for Greece: analysis of import/export and punctual FTZs
 - for Italy: analysis of impact of EMFTA and of new maritime services on regional GDP, definition of priorities in new maritime connections

FREEMED project

DSS Architecture



The FREEMED project

Scenarios:

- ✓ partial and full implementation of EMFTA under the current transport supply
- ✓ improvement in maritime services connections
 - new connections from Campania, Puglia and Sicilia serving Algeria and Morocco, Tunisia, Libya, Egypt and Israel

Appraisal:

- ✓ impacts on trade within the Euro-Mediterranean basin
- ✓ detailed impact for Italian regions:
 - GDP and production
 - Exports
 - Priority list for new maritime services

Study area

Euro-Mediterranean basin (49 countries):



Impacts on Euro-Mediterranean trade

Impacts on Euro-Mediterranean trade under the full establishment of the Euro-Mediterranean FTZ (% change in trade of perishable goods):

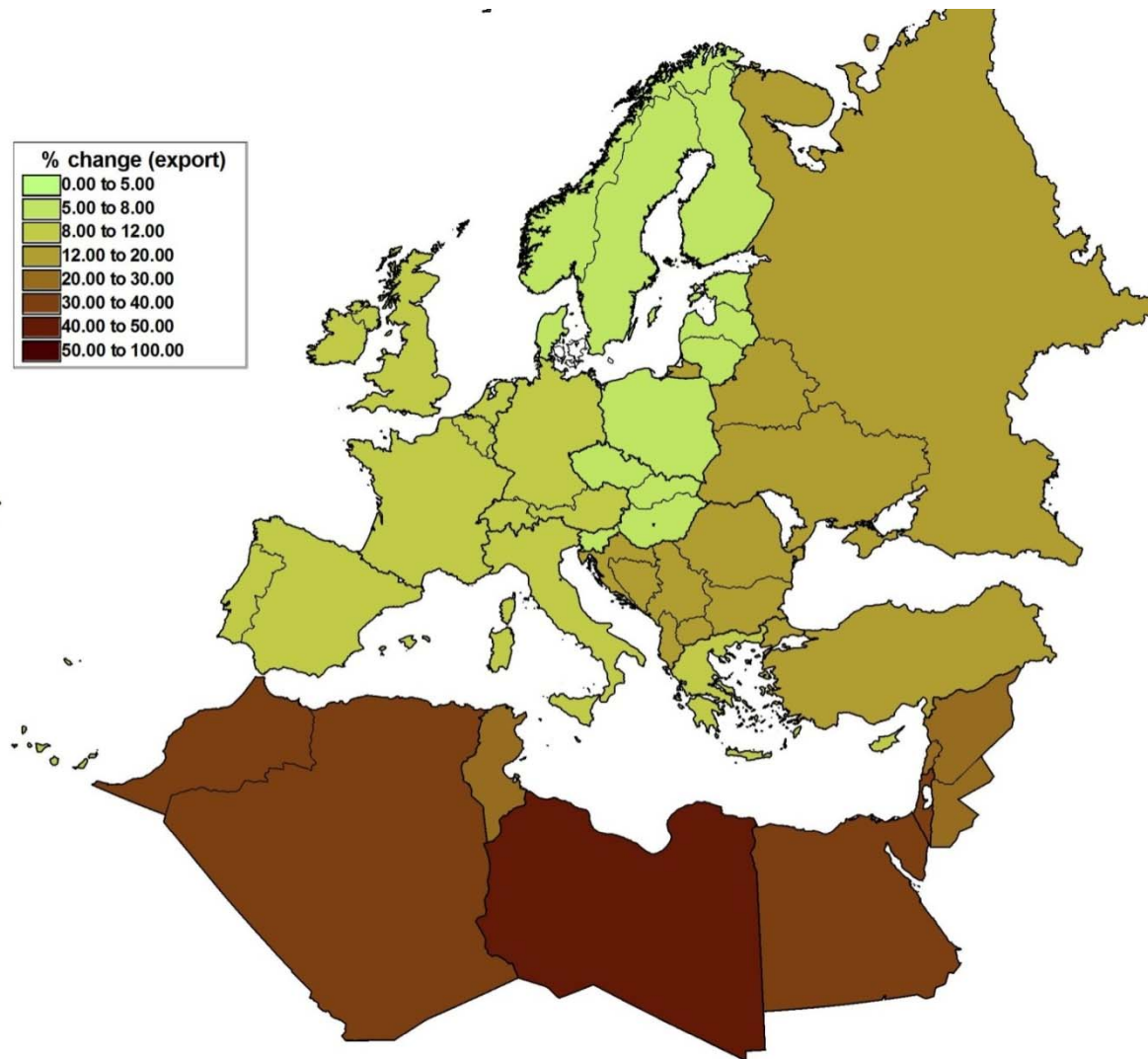
	Algeria and Morocco	Austria, Switzerland and Germany	Cyprus	Eastern Europe	Egypt	France and Lower Countries	Greece	Israel	Italy	Libya	Malta	Middle East	Norther Europe	Polonia and Baltic States	Romania, Bulgaria and Balkans	Slovenia, Czeck Rep. and Hungary	Spain and Portugal	Tunisia	Turkey	United Kingdom and Ireland
Algeria and Morocco	6,98%	15,73%	0,00%	0,00%	8,66%	9,04%	0,00%	0,00%	0,00%	0,00%	0,00%	50,52%	0,00%	0,00%	0,00%	0,00%	9,04%	0,00%	16,36%	8,66%
Austria, Switzerland and Germany	6,98%	0,00%	0,00%	10,77%	0,00%	0,00%	14,54%	0,00%	18,97%	0,00%	6,98%	0,00%	0,00%	0,00%	0,00%	0,00%	0,00%	8,16%	16,01%	0,00%
Cyprus	15,73%	0,00%	0,00%	12,64%	0,00%	0,00%	14,48%	0,00%	0,00%	0,00%	15,94%	0,00%	0,00%	0,00%	0,00%	0,00%	0,00%	9,85%	15,74%	0,00%
Eastern Europe	0,00%	0,00%	0,00%	25,18%	0,00%	0,00%	23,77%	0,00%	0,00%	0,00%	0,00%	0,00%	0,00%	0,00%	0,00%	0,00%	23,45%	23,79%	0,00%	0,00%
Egypt	15,02%	10,77%	12,30%	23,62%	12,30%	12,30%	47,09%	12,30%	50,02%	12,30%	14,92%	11,86%	12,30%	24,15%	12,09%	12,09%	0,00%	14,82%	12,30%	0,00%
France and Lower Countries	8,66%	0,00%	0,00%	12,30%	0,00%	0,00%	14,65%	0,00%	20,95%	0,00%	8,66%	0,00%	0,00%	0,00%	0,00%	0,00%	0,00%	9,85%	16,35%	0,00%
Greece	9,04%	0,00%	0,00%	12,30%	0,00%	0,00%	14,65%	0,00%	20,71%	0,00%	8,66%	0,00%	0,00%	0,00%	0,00%	0,00%	0,00%	9,85%	16,35%	0,00%
Israel	0,00%	12,20%	13,52%	23,92%	48,29%	13,52%	13,52%	13,52%	13,52%	13,52%	12,74%	13,52%	24,49%	13,52%	13,52%	13,52%	12,14%	13,52%	13,52%	0,00%
Italy	8,66%	0,00%	0,00%	12,30%	0,00%	0,00%	14,65%	0,00%	20,71%	0,00%	8,66%	0,00%	0,00%	0,00%	0,00%	0,00%	0,00%	9,85%	16,35%	0,00%
Libya	49,65%	18,97%	25,91%	29,05%	20,95%	20,71%	20,71%	20,71%	20,71%	49,70%	49,70%	22,72%	29,05%	0,00%	0,00%	0,00%	22,72%	29,05%	0,00%	21,69%
Malta	16,00%	0,00%	0,00%	12,64%	0,00%	0,00%	8,71%	0,00%	0,00%	0,00%	8,66%	0,00%	0,00%	0,00%	0,00%	0,00%	14,92%	15,74%	0,00%	0,00%
Middle East	50,52%	6,98%	8,66%	0,00%	8,66%	8,66%	8,66%	8,66%	49,70%	8,66%	0,00%	0,00%	0,00%	0,00%	0,00%	0,00%	10,70%	0,00%	15,33%	10,93%
Norther Europe	0,00%	0,00%	0,00%	11,86%	0,00%	0,00%	14,15%	0,00%	0,00%	0,00%	0,00%	0,00%	0,00%	0,00%	0,00%	0,00%	0,00%	7,72%	15,69%	0,00%
Polonia and Baltic States	0,00%	0,00%	0,00%	12,30%	0,00%	0,00%	14,64%	0,00%	0,00%	0,00%	0,00%	0,00%	0,00%	0,00%	0,00%	0,00%	0,00%	9,10%	15,74%	0,00%
Romania, Bulgaria and Balkans	0,00%	0,00%	0,00%	24,15%	0,00%	0,00%	24,49%	0,00%	0,00%	0,00%	0,00%	0,00%	0,00%	0,00%	0,00%	0,00%	23,97%	24,69%	0,00%	0,00%
Slovenia, Czeck Rep. and Hungary	0,00%	0,00%	0,00%	12,64%	0,00%	0,00%	12,09%	0,00%	0,00%	0,00%	0,00%	0,00%	0,00%	0,00%	0,00%	0,00%	0,00%	14,92%	1,77%	0,00%
Spain and Portugal	9,04%	0,00%	0,00%	12,09%	0,00%	0,00%	14,65%	0,00%	22,72%	0,00%	10,70%	0,00%	0,00%	0,00%	0,00%	0,00%	0,00%	9,10%	16,35%	0,00%
Tunisia	0,00%	8,16%	9,85%	23,45%	0,00%	9,85%	9,85%	9,85%	49,23%	9,85%	0,00%	7,72%	9,10%	23,97%	9,10%	9,10%	9,10%	14,82%	9,85%	0,00%
Turkey	16,36%	1,23%	1,77%	23,79%	16,16%	1,77%	1,77%	13,87%	1,77%	0,00%	1,77%	15,33%	4,23%	1,77%	24,66%	1,77%	1,77%	16,93%	1,77%	0,00%
United Kingdom and Ireland	8,66%	0,00%	0,00%	0,00%	12,30%	0,00%	0,00%	14,65%	0,00%	21,69%	0,00%	10,93%	0,00%	0,00%	0,00%	0,00%	0,00%	9,85%	16,35%	0,00%

Impacts on Euro-Mediterranean trade

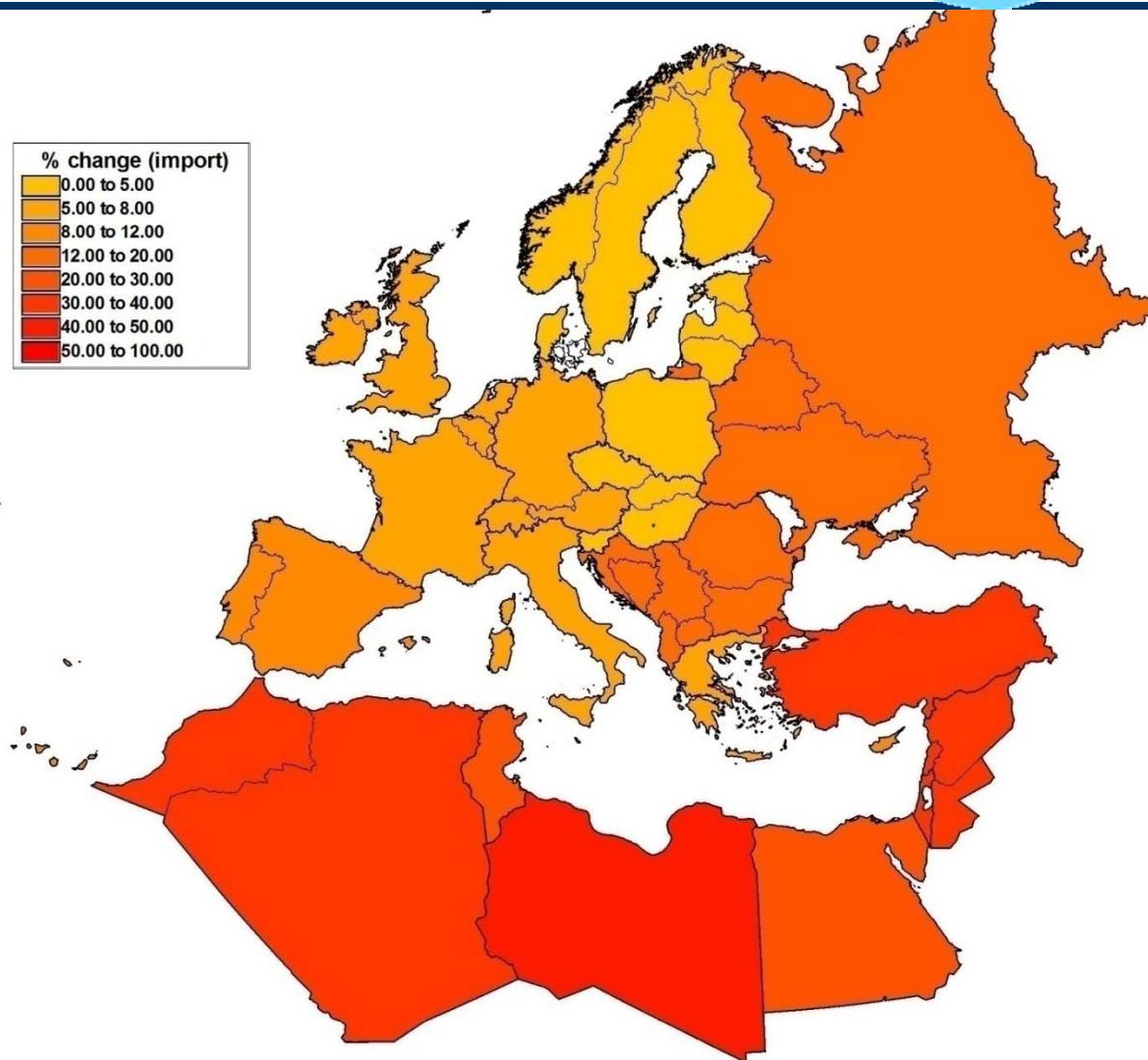
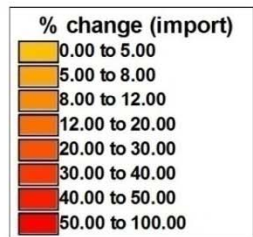
Impacts on Euro-Mediterranean trade under the full establishment of the Euro-Mediterranean FTZ (% change in trade of manufactured goods):

	Algeria and Morocco	Austria, Switzerland and Germany	Cyprus	Eastern Europe	Egypt	France and Lower Countries	Greece	Israel	Italy	Libya	Malta	Middle East	Norther Europe	Polonia and Baltic States	Romania, Bulgaria and Balkans	Slovenia, Czeck Rep. and Hungary	Spain and Portugal	Tunisia	Turkey	United Kingdom and Ireland
Algeria and Morocco	0,00%	8,49%		6,98%	0,00%	11,10%		0,00%	25,81%	8,09%	11,34%				6,76%	0,00%	0,00%	9,08%	0,00%	
Austria, Switzerland and Germany	0,00%	0,00%	0,00%	0,00%	0,00%	0,00%	0,00%	2,95%	0,00%	12,32%	0,00%	0,00%	0,00%	0,00%	0,00%	0,00%	0,00%	0,00%	0,00%	0,00%
Cyprus	8,49%	0,00%	0,00%	4,11%	0,00%	0,00%	0,00%	5,48%	0,00%	0,00%	0,00%	0,00%	0,00%	0,00%	0,00%	0,00%	0,00%	5,62%	0,00%	0,00%
Eastern Europe	0,00%	0,00%		17,90%	0,00%	0,00%	0,00%	16,69%	0,00%					0,00%				18,54%	14,28%	0,00%
Egypt	6,98%	0,00%	0,00%	18,18%		0,00%	0,00%	22,32%	0,00%	23,73%	0,00%	6,42%	2,66%	0,00%	18,42%	0,42%	0,42%	0,00%	3,40%	0,00%
France and Lower Countries	0,00%	0,00%	0,00%	0,00%	0,00%		0,00%	0,07%	0,00%	12,92%	0,00%	0,00%	0,00%	0,00%	0,00%	0,00%	0,00%	0,00%	0,00%	0,00%
Greece	11,10%	0,00%	0,00%	0,00%	0,00%	0,00%		0,07%	0,00%	12,47%	0,00%	0,00%	0,00%	0,00%	0,00%	0,00%	0,00%	0,00%	0,00%	0,00%
Israel		0,00%	0,00%	17,66%	24,44%	0,00%	0,00%		0,00%		0,00%		0,00%	0,00%	16,20%	0,00%	0,00%		0,00%	0,00%
Italy	0,00%	0,00%	0,00%	0,00%	0,00%	0,00%	0,00%	0,07%		12,92%	0,00%	0,00%	0,00%	0,00%	0,00%	0,00%	0,00%	0,00%	0,00%	0,00%
Libya	25,81%	12,32%	12,92%	13,54%	12,92%	12,47%		12,92%				25,62%			20,31%			13,54%	0,00%	13,17%
Malta	8,09%	0,00%	0,00%	4,11%	0,00%	0,00%	4,23%	0,00%				0,42%	0,00%	0,00%			0,00%	5,54%	0,00%	0,00%
Middle East	11,34%	0,00%	0,00%	0,00%	0,00%	0,00%		0,00%	25,62%	0,42%								0,42%	0,00%	7,88%
Norther Europe		0,00%	0,00%	2,66%	0,00%	0,00%	2,16%	0,00%	0,00%	0,00%			0,00%		0,00%	0,00%	0,00%	2,53%	0,00%	0,00%
Polonia and Baltic States		0,00%	0,00%	4,00%	0,00%	0,00%	5,21%	0,00%	0,00%	0,00%			0,00%		0,00%	0,00%	0,00%	5,53%	0,00%	0,00%
Romania, Bulgaria and Balkans		0,00%	0,00%	18,40%	0,00%	0,00%	16,20%	0,00%								0,00%			16,16%	0,00%
Slovenia, Czeck Rep. and Hungary	6,76%	0,00%	0,00%	4,11%	0,00%	0,00%	0,00%	0,00%	0,00%	20,31%	0,00%		0,00%	0,00%	0,00%		0,00%	5,45%	0,00%	0,00%
Spain and Portugal	0,00%	0,00%	0,00%	0,42%	0,00%	0,00%	0,07%	0,00%	0,00%	0,00%	0,42%	0,00%	0,00%	0,00%	0,00%	0,00%	0,00%	0,45%	0,00%	0,00%
Tunisia	0,00%	0,00%	0,00%	18,54%	0,00%	0,00%	0,00%	0,00%	23,67%	0,00%	0,00%	2,53%	0,00%		0,45%	0,45%		3,32%	0,00%	0,00%
Turkey	9,08%	0,00%	0,00%	18,22%	8,35%	0,00%	0,00%	0,00%	0,00%	0,00%	0,00%	7,88%	0,00%	0,00%	16,16%	0,00%	0,00%	9,79%		0,00%
United Kingdom and Ireland	0,00%	0,00%	0,00%	0,00%	0,00%	0,00%	0,07%	0,00%	13,17%	0,00%	0,00%	0,00%	0,00%	0,00%	0,00%	0,00%	0,00%	0,00%	0,00%	0,00%

Application: enforcement of EMFTA agreements

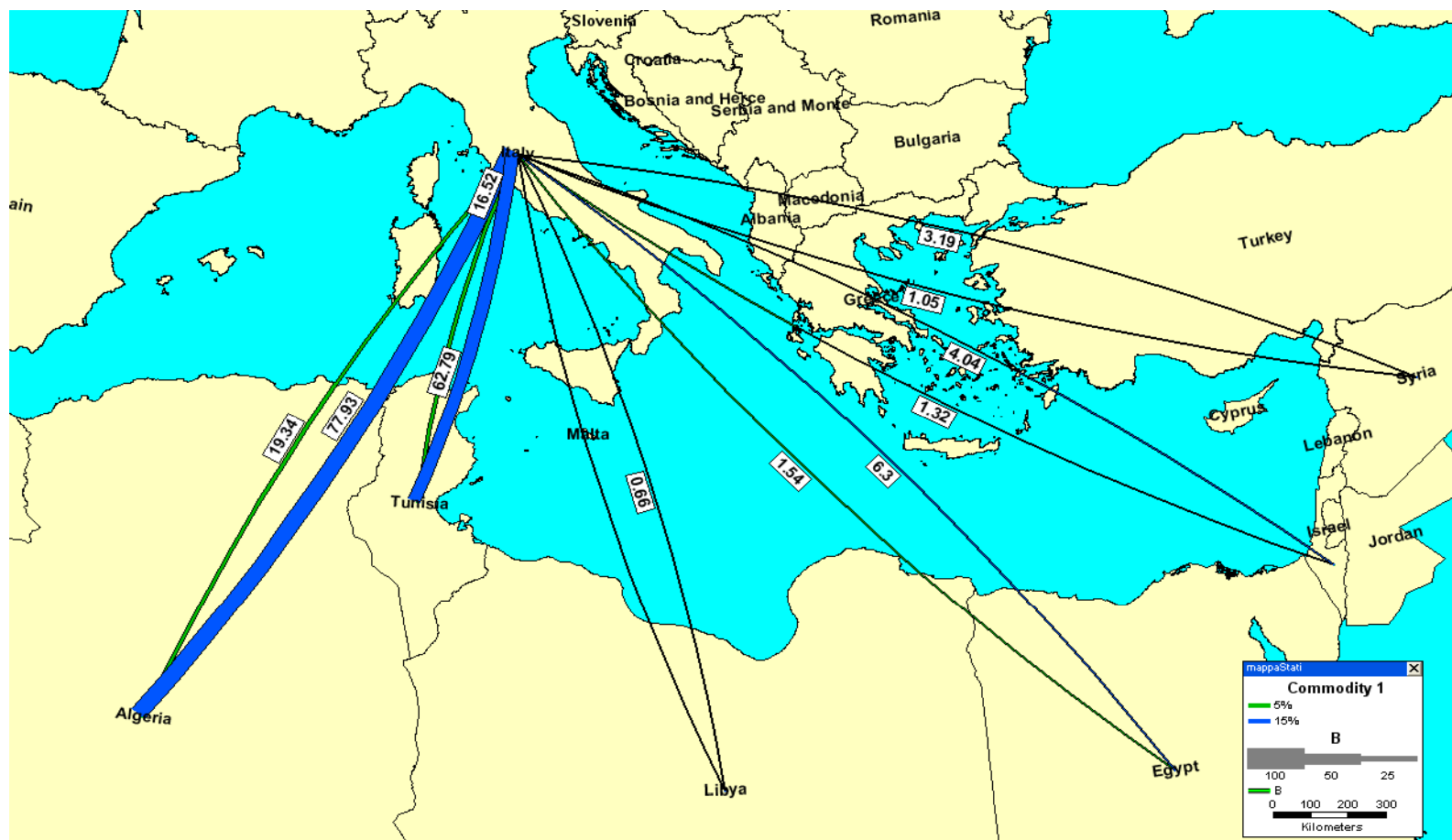


Application: enforcement of EMFTA agreements



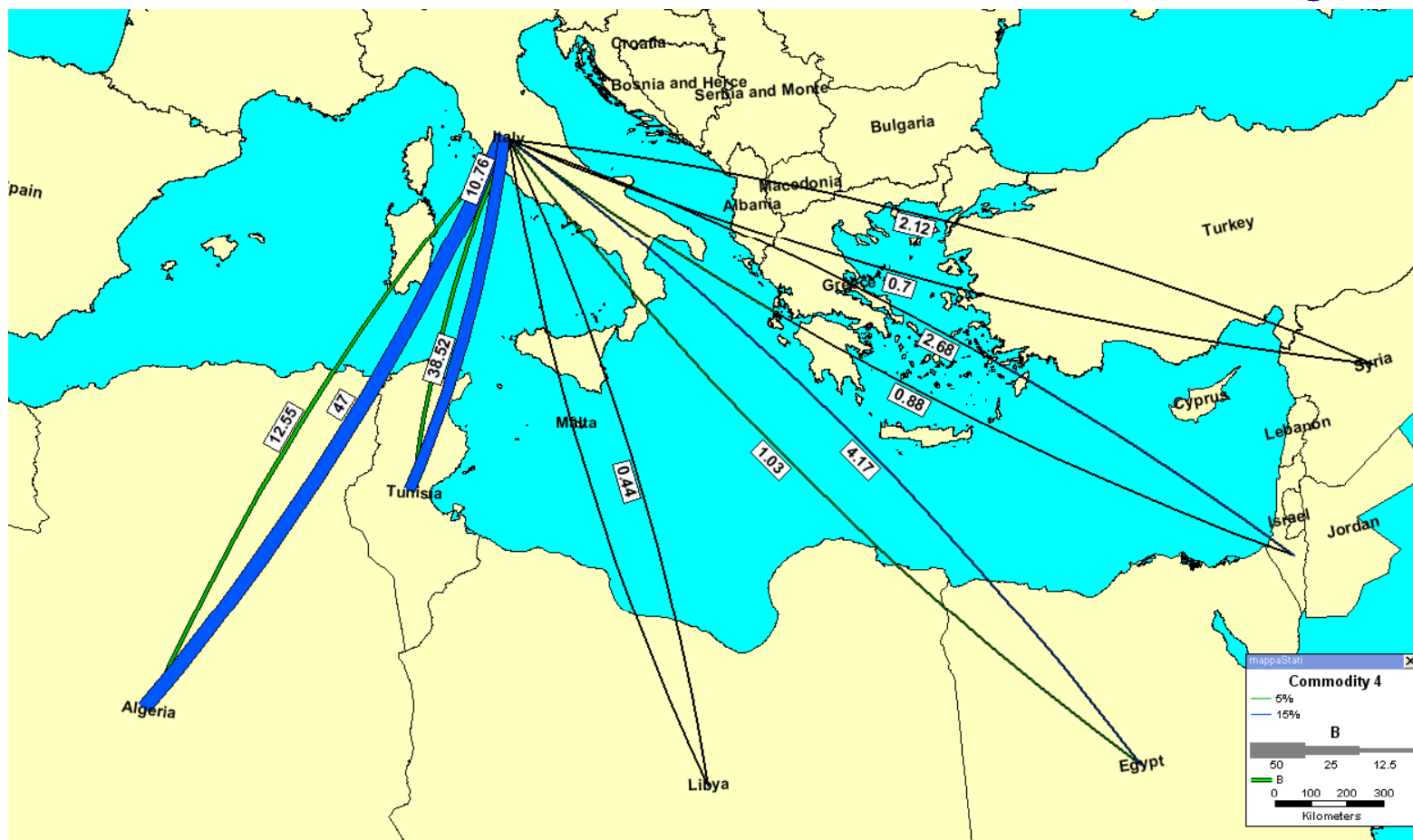
Focus on Italian trade

Impacts of enhancement of transport services under full establishment of the FTZ on Italian trade for perishable goods:



Focus on Italian trade

Impacts of enhancement of transport connections under full establishment of the FTZ on Italian trade for manufactured goods:



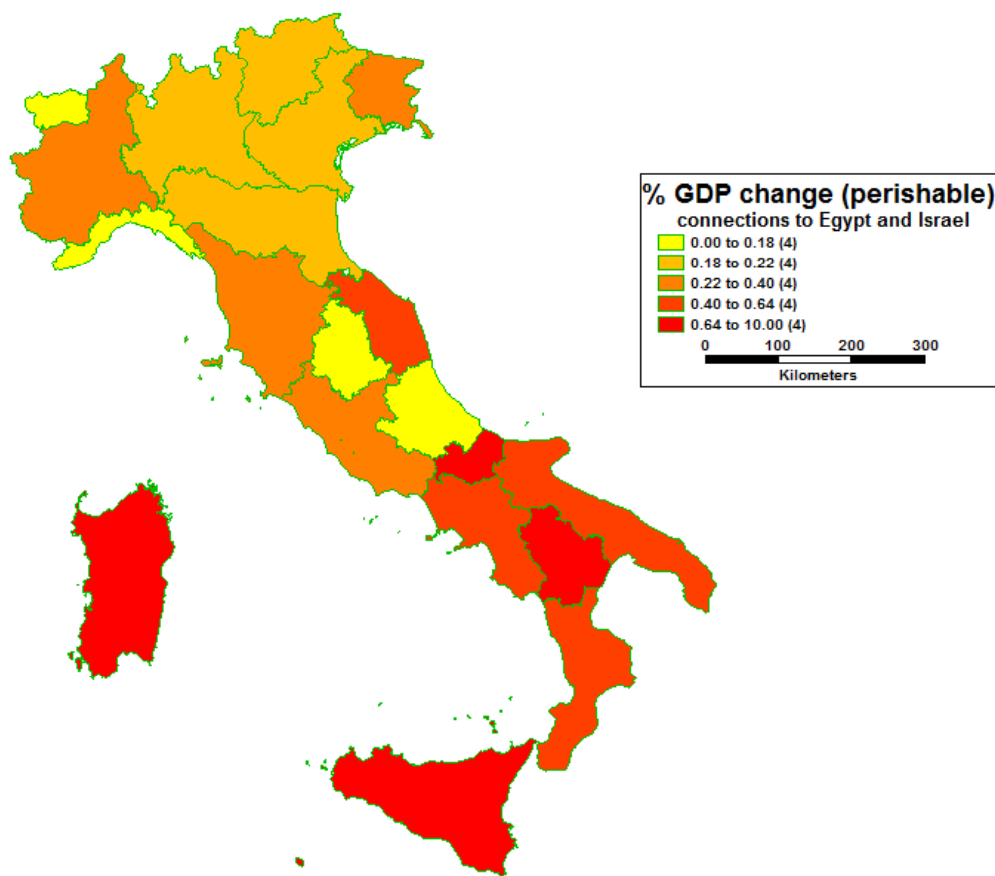
Application: Southern Italy-Africa SSS services

The magnitude of the predicted trade increase suggests high potential for new connections between Southern Europe and Northern Africa. For the sake of simplicity, the application is restricted to Southern Italian ports:

<i>connections from/to</i>	Algeria (Algeri)	Tunisia (Tunisi)	Egypt (Alessandria)
	Morocco (Tangeri)	Lybia (Tripoli)	Israel (Haifa)
Campania (Napoli)	scenario 1	scenario 2	scenario 3
Puglia (Bari)	scenario 4	scenario 5	scenario 6
Sicilia (Palermo)	scenario 7	scenario 8	scenario 9

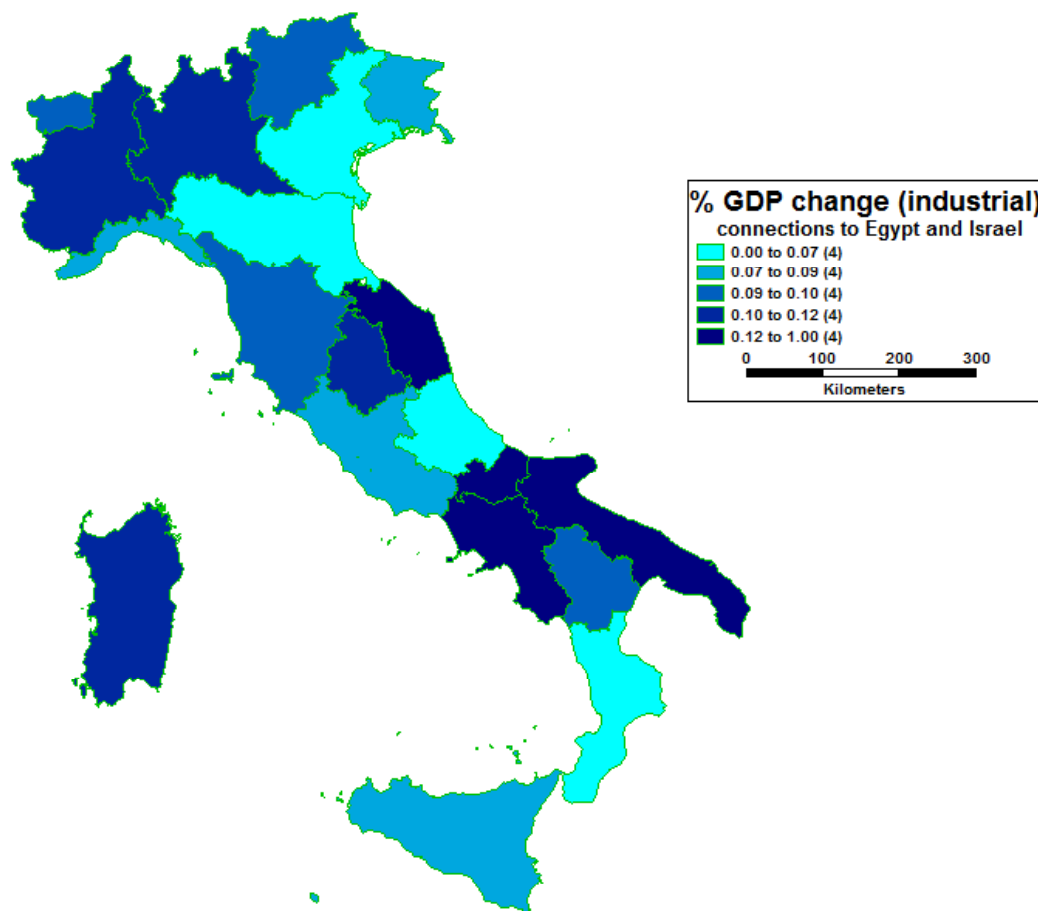
Impacts on regional GDP

Percentage variation of Italian region GDP under the maritime services improvement scenarios (perishable, scenario 3):



Impacts on regional GDP

Percentage variation of Italian region GDP under the maritime services improvement scenarios (industrial, scenario 3):



Impacts for GDP of Campania

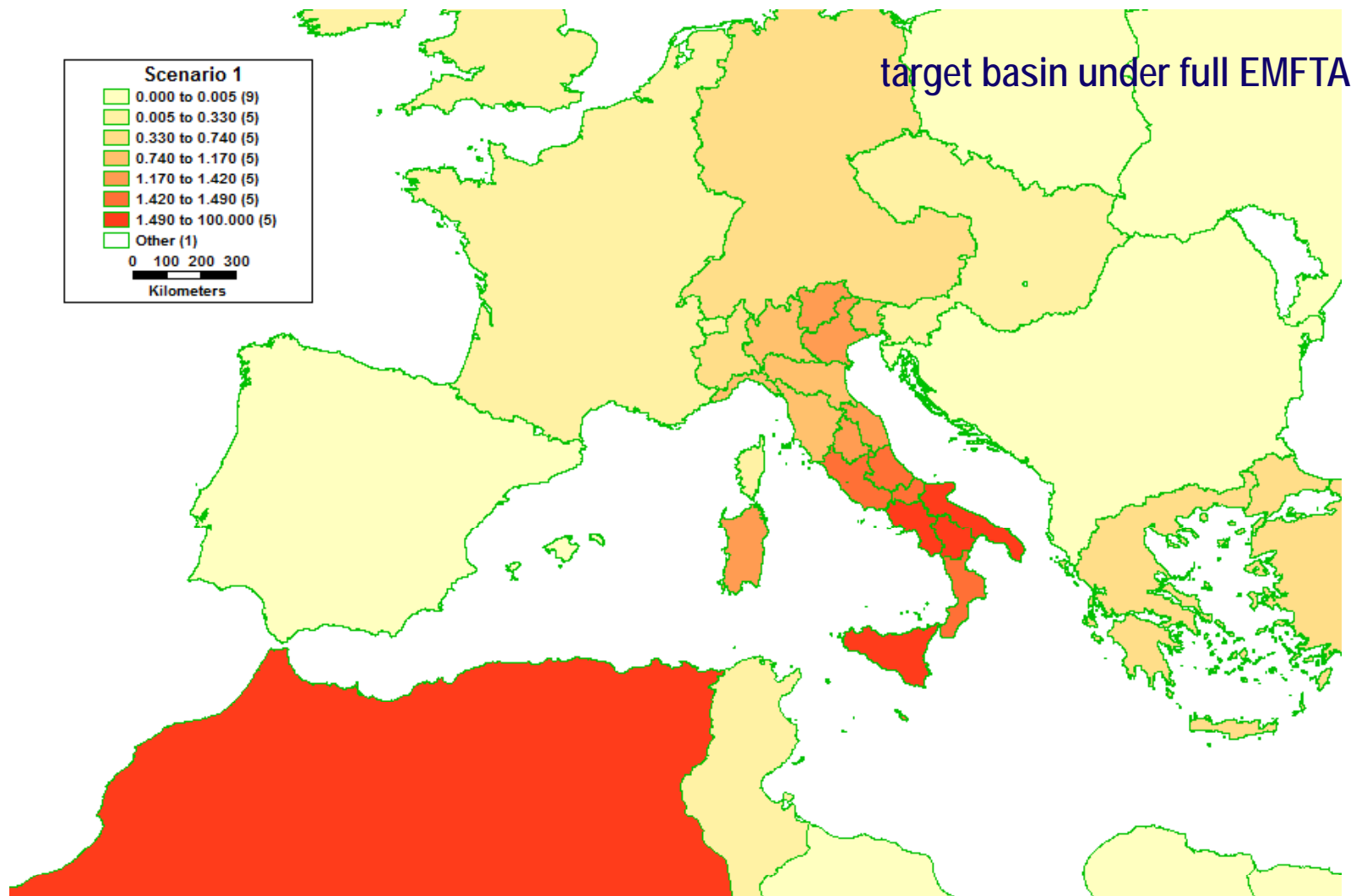
Percentage variation of Campania GDP under the maritime services improvement scenarios:

	sector	Algeria (Algeri) Marocco (Tangeri)	Tunisia (Tunisi) Libia (Tripoli)	Egitto (Alessandria) Israele (Haifa)	TOTAL
Campania (Napoli)	<i>perishable</i>	0.29%	0.35%	0.10%	0.96%
	<i>industrial</i>	0.07%	0.07%	0.02%	0.21%
	<i>services</i>	0.02%	0.02%	0.01%	0.06%
Puglia (Bari)	<i>perishable</i>	0.08%	0.19%	0.16%	0.44%
	<i>industrial</i>	0.02%	0.04%	0.03%	0.09%
	<i>services</i>	0.01%	0.01%	0.01%	0.03%
Sicilia (Palermo)	<i>perishable</i>	0.09%	0.36%	0.36%	0.61%
	<i>industrial</i>	0.02%	0.07%	0.07%	0.12%
	<i>services</i>	0.01%	0.02%	0.02%	0.04%
TOTAL	<i>perishable</i>	0.46%	0.60%	0.73%	1.08%
	<i>industrial</i>	0.11%	0.13%	0.15%	0.24%
	<i>services</i>	0.03%	0.04%	0.04%	0.07%

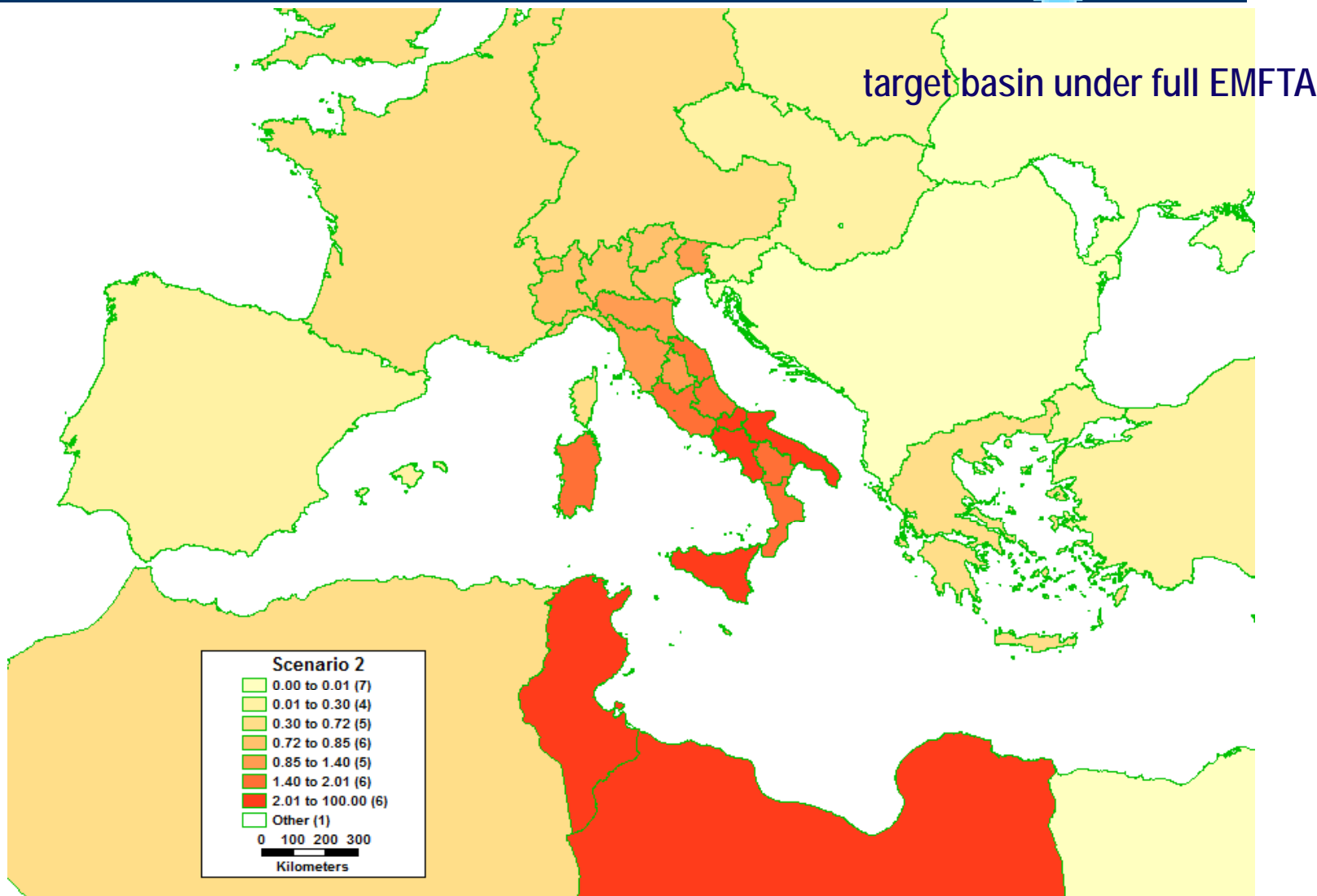
Southern Italy: + 0.82% perishable, + 0.14% industrial

Italy: + 0.42% perishable, + 0.13% industrial

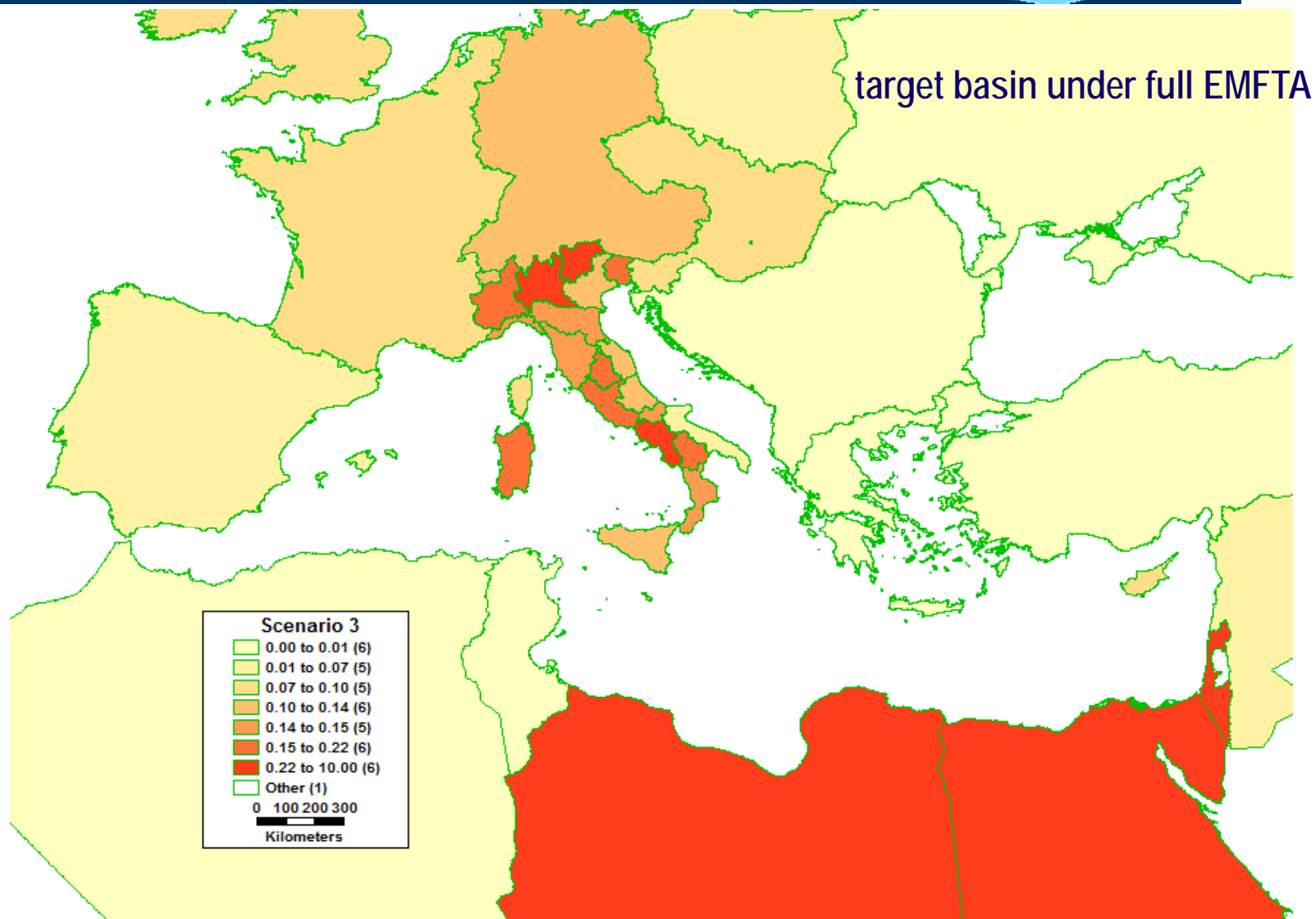
Campania to Algeria and Morocco: target basin



Campania to Tunisia and Libya: target basin



Campania to Egypt and Israel: target basin



Capacity analysis of the maritime services

Load factor for the hypothesized new services under the current EMFTA agreement pattern:

<i>connections from/to</i>	Algeria (Algeri)	Tunisia (Tunisi)	Egypt (Alessandria)
	Morocco (Tangeri)	Lybia (Tripoli)	Israel (Haifa)
Campania (Napoli)	>> 1	> 1	< 0.2
Puglia (Bari)	< 0.1	0.85	< 0.2
Sicilia (Palermo)	< 0.1	0.76	< 0.1

Load factor for the hypothesized new services under the full adoption of the EMFTA agreements:

<i>connections from/to</i>	Algeria (Algeri)	Tunisia (Tunisi)	Egypt (Alessandria)
	Morocco (Tangeri)	Lybia (Tripoli)	Israel (Haifa)
Campania (Napoli)	>> 1	>> 1	> 1
Puglia (Bari)	< 0.1	> 1	< 0.2
Sicilia (Palermo)	< 0.1	> 1	< 0.1

Conclusion

- ✓ availability of an advanced and reliable system of model for the appraisal of new SSS services in terms of:
 - ✓ load factor
 - ✓ target basin
 - ✓ economic impacts
- ✓ clear evidence of potential new markets for SSS under the enforcement of EMFTA agreements, with a significant role played by Southern Italian Ports