

Athens, 4-5 May 2017

European Court of Auditors

Performance audit in the ECA

Presentation by Enrico GRASSI

The presentation does not bind the Institution



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Content

- **Part 1: Introduction to Performance Audit: Why do public sector auditors carry out performance audits, how, and what is the difference with other audits**
- **Part 2: The performance audit cycle – main steps**
- **Part 3: Making a study and assess risks (where can it go wrong)**
- **Part 4: The Performance Audit plan (APM) and its components**
- **Part 5: Findings to report, and a practical showcase**
- **Part 6: Reporting, Recommendations and Impact**

Part One

Introduction to Performance Audit



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Content

- **Why do public sector auditors carry out performance audits?**
- What is performance audit?
- How does the concept of three E's work?
- What is the difference with other audits?

Expenditure may be legal and regular, but...



Why ? (ECA context)

- Sound financial management is embedded in:

1. the Treaty on the Functioning of the EU

➔ legislative requirement of Article 310, paragraph 5 of the consolidated text:

“The budget shall be implemented in accordance with the principle of sound financial management. Member States shall cooperate with the Union to ensure that the appropriations entered in the budget are used in accordance with this principle.”

Why ? (ECA context)

2. The Financial Regulation

→ Chapter 7, paragraphs 30 to 33:

“Appropriations shall be used in accordance with the principle of sound financial management, namely in accordance with the principles of economy, efficiency and effectiveness.

The principle of “economy” requires that the resources used by the institution in the pursuit of its activities shall be made available in due time, in appropriate quantity and quality and at the best price.

The principle of “efficiency” concerns the best relationship between resources employed and results achieved.

The principle of “effectiveness” concerns the attainment of the specific objectives set and the achievement of the intended results.”

Content

- Why do public sector auditors carry out performance audits?
- **What is performance audit?**
- How does the concept of three E's work?
- What is the difference with other audits?

What is Performance Audit?

Assessment of the quality of management of EU funds

Economy

= Cost / output

Example: SR 5/2013 – The cost of roads

Efficiency

= input / output

Example: SR 6/2009 – EU Food Aid for Deprived Persons – 'Are the means commensurate with the objectives sought and adequately implemented?'

Effectiveness

= results / objectives

Esempio: RS 3/2013 – Effectiveness of the Marco Polo Programme

Content

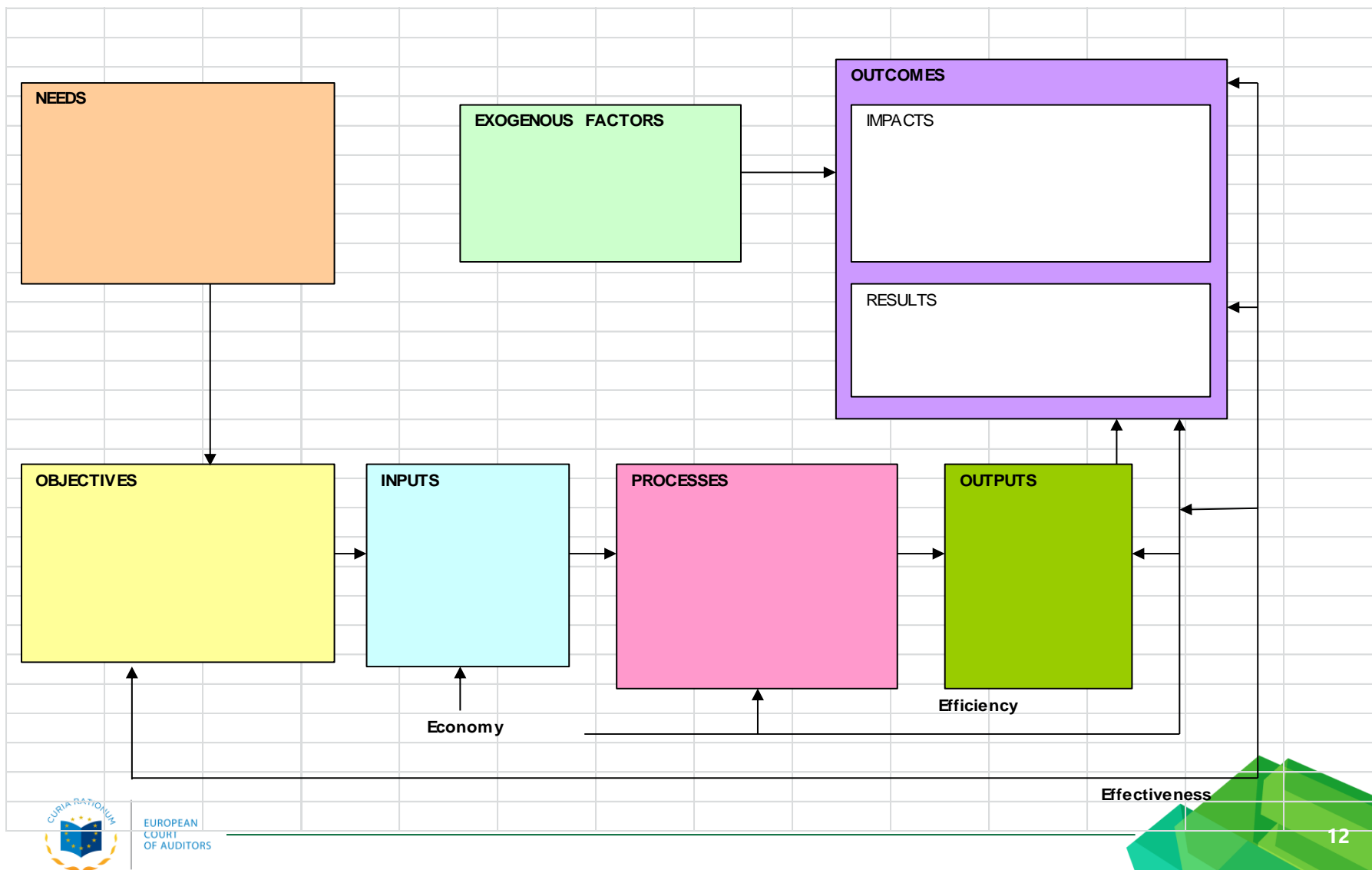
- Why do public sector auditors carry out performance audits?
- What is performance audit?
- **How does the concept of three E's work?**
- What is the difference with other audits?

Fundamental Definitions

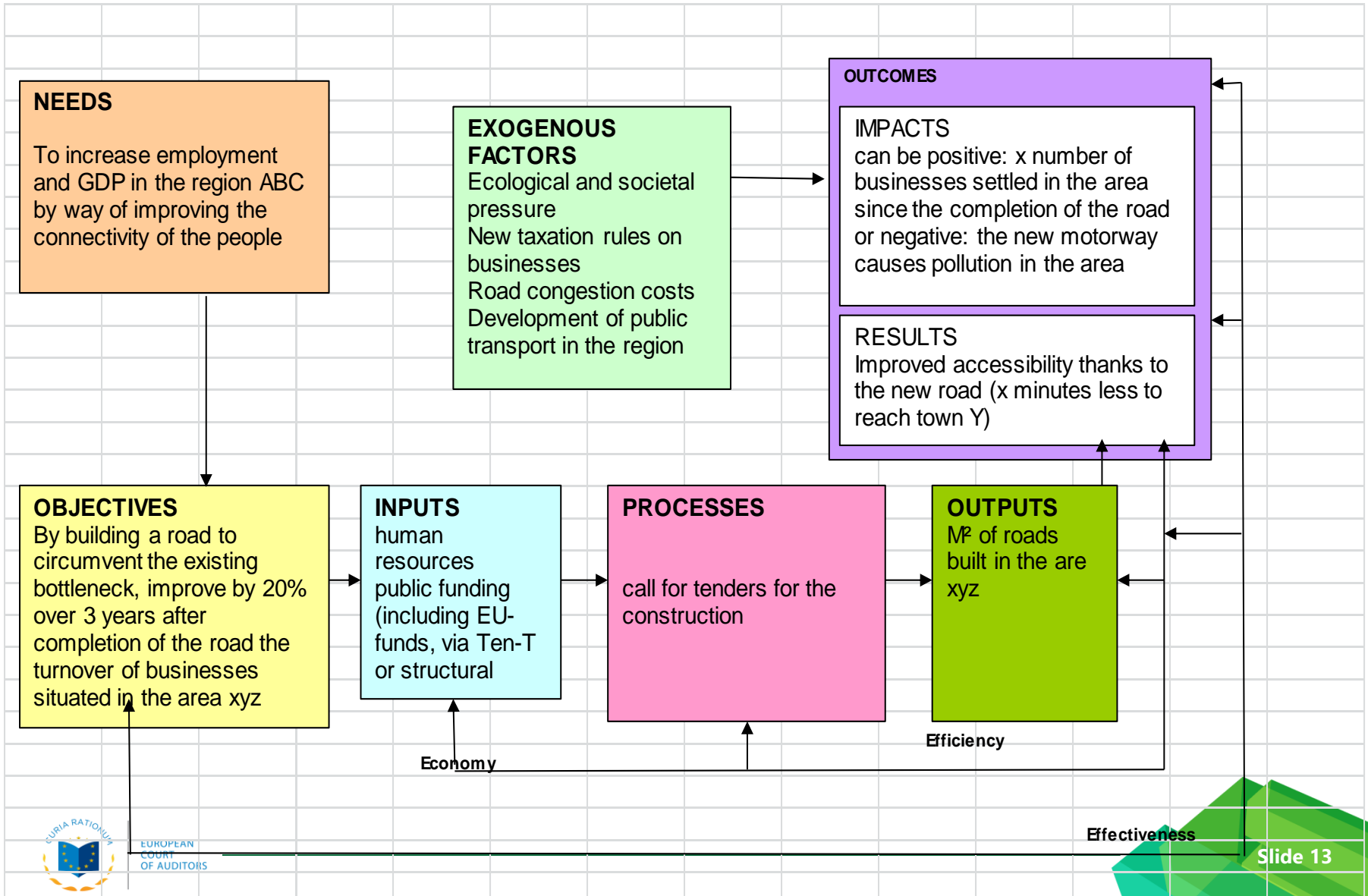
- **Economy**: resources made available in due time, in appropriate quantity and quality and at the best price
- **Efficiency**: relationship between resources employed and outputs and results achieved
- **Effectiveness**: relationship between the achievement of objectives and the intended results and outcomes

? → *See a « Programme Logic Model » (PLM)*

The 3 « E's »: Economy, Efficiency and Effectiveness



An example



Content

- Why do public sector auditors carry out performance audits?
- What is performance audit?
- How does the concept of three E's work?
- **What is the difference with other audits?**

Types of audits

Selected audits (*special reports*)

Financial audit

Reliability of the accounts

Obtain evidence on the extent to which transactions, assets and liabilities have been completely, correctly and accurately entered in the accounting records and presented in the financial statements

Compliance audit

Legality and regularity of transactions

Obtain evidence on the extent to which EU revenue and spending operations have been carried out in accordance with contractual and legal requirements and are correctly and accurately calculated

Performance audit

Soundness of financial management

Obtain evidence on the extent to which EU funds have been used economically, efficiently and effectively, and provide value for money

Statement of assurance (*annual reports*)

Comparison Performance Audit : Financial Audit

- No “one size fits all” → creativity needed; thinking “out of the box”
- Focus on policy, activities and outcomes
- Team approach
- Wide range of skills
- Standardised approach
- Focus on financial transactions and systems audit approach
- Individual auditor(s)
- Primarily financial skills

Performance audit versus compliance audit

- No “one size fits all” → creativity needed; thinking “out of the box”
- Focus on policy, activities and outcomes
- Team approach
- Wide range of skills
- Standardised approach
- Focus on legislation and systems
- Individual auditor(s)
- Primarily financial skills

Performance Audit vs internal audit and evaluation?

Internal audit and evaluation:

- Is a judgment of interventions (needs, results, impacts) by the auditee
- *Is the responsibility of the manager*

Performance audit:

- Is an assessment of the management of EU funds by the auditee
- Aims to hold the auditee to account
- Aims to improve future financial management

Main issue is that performance Audit is independent of management → in the EU context, it is the responsibility of the ECA, carried out by the auditor.

Part Two

Overview of the performance audit cycle – the main steps



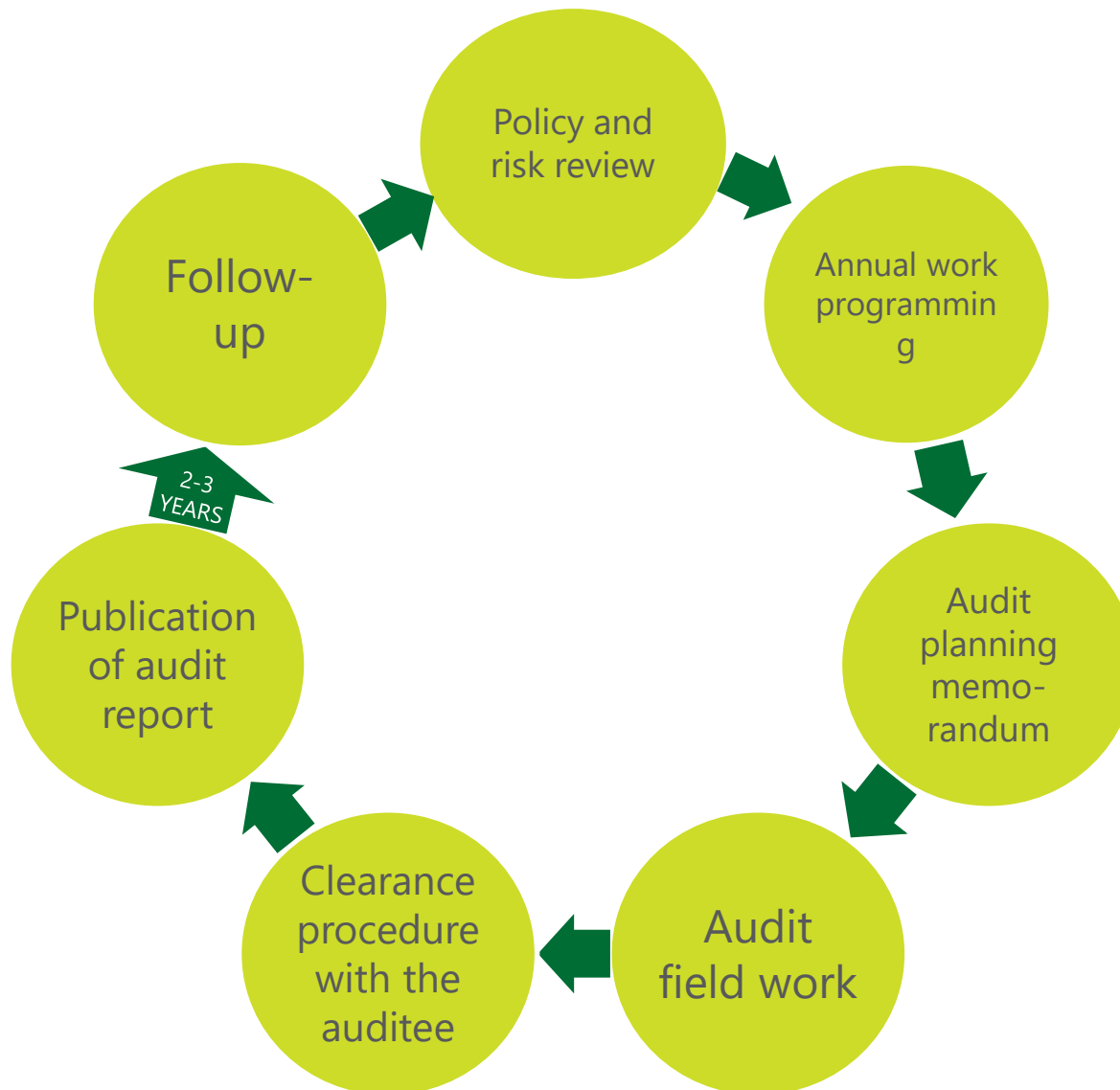
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Content

The main steps

- Policy and risk review and annual work plan
- Audit planning memorandum
- Audit field work
- Clearing the findings with the auditee
- Publication of audit reports
- Follow-up

The organisation of audit work



Content

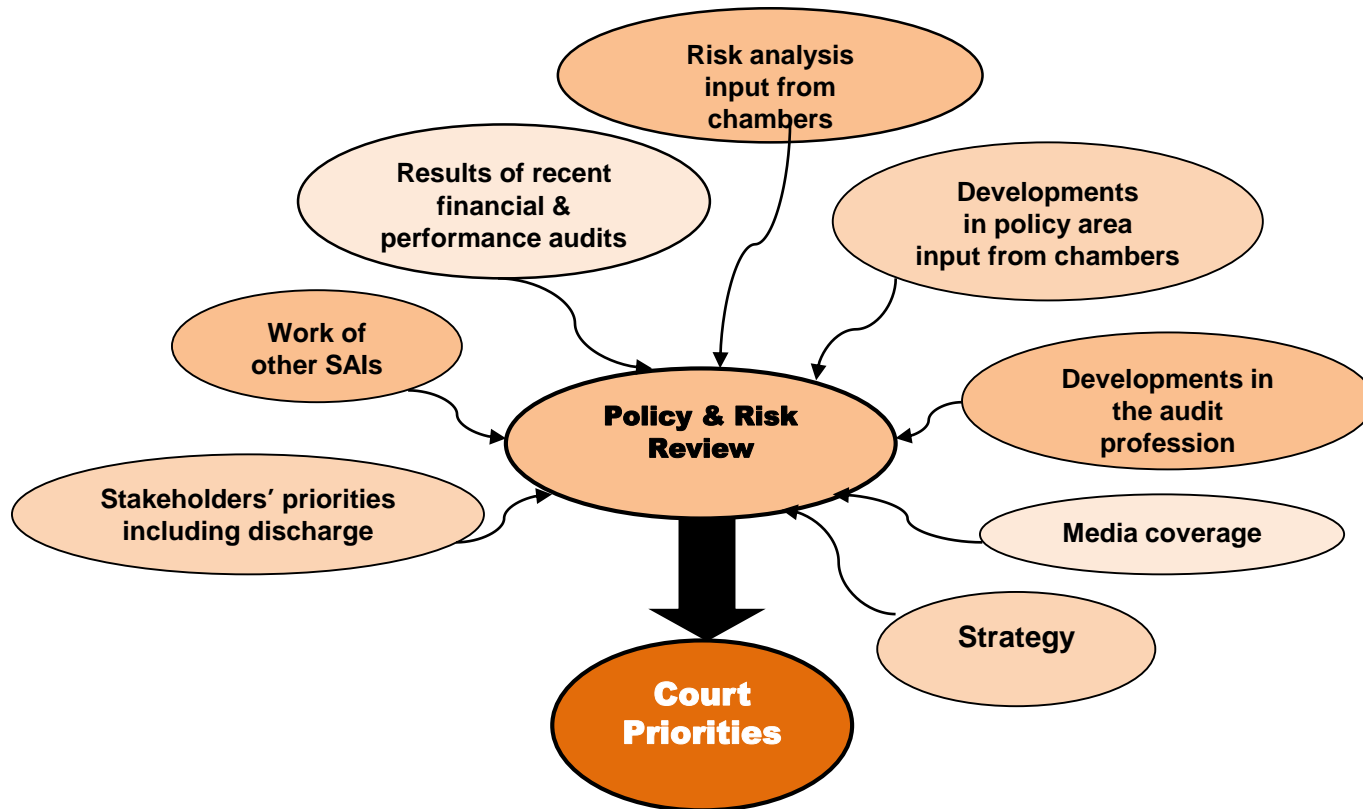
- The main steps
- **Policy and risk review**
- Annual work plan
- Audit planning memorandum
- Audit field work
- Clearing the findings with the auditee
- Publication of audit reports
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Why a PRR?

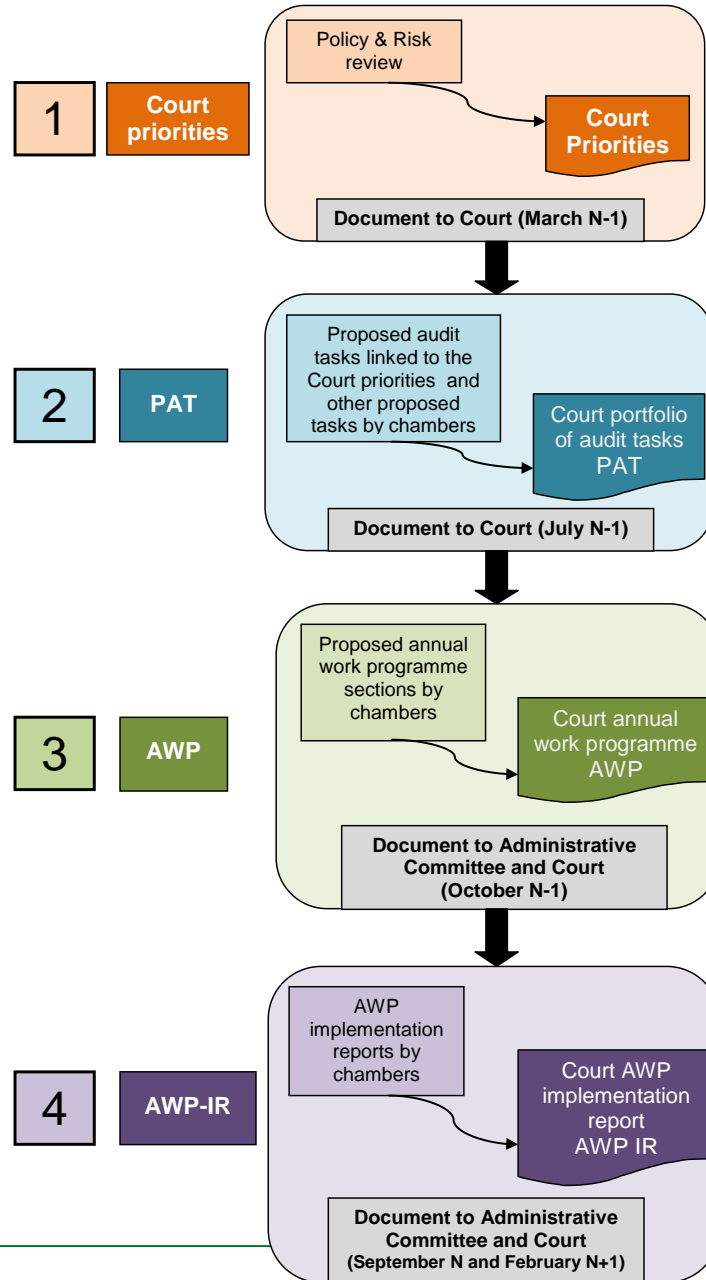
- To ensure that the Court selects tasks and products which best reflect risks, public interest and the potential for the Court to contribute to EU accountability.
 - Based on the knowledge and expertise developed Court-wide.
- ➔ The input from the chambers is particularly valuable at this stage:
- Audit chambers identify the risks for their audit area.
 - Chambers also designate a policy officer for each policy area, to take part in a Court-wide network of policy experts responsible for analysing recent developments and their implications for the Court's work.



A comprehensive analysis



Programming and monitoring: a four-step process



Example: the ECA 2017 Priorities

- **Energy and climate change, including climate mitigation and adaptation and the progress made since the adoption of the Energy Union**
- The achievement of a deeper, fairer, and more complete **Single Market, including better regulation**
- Progress towards an **economic and financial union**
- Achieving **economic growth and jobs through investment**
- Tackling **poverty and social exclusion**
- **Responding to migration, integration and European security challenges**
- **Supporting the EU's move towards sustainable development**
- **New ways of financing** EU policies and initiatives
- **Better EU spending: focusing on priorities, efficiency and results**
- Deliver **results-oriented annual reports**

In practice

- Portfolio of audit tasks maintained by audit groups
- Audit tasks/topics → 'auditable'
- Ranked following 4 criteria:
 - Risk → see later, a "risk assessment": theory and practice
 - Materiality → see next slide
 - Relevance → does it matter?
 - Coverage → has it already been audited recently?

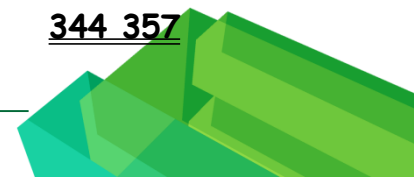
Materiality: an example: Audit field Chamber II

	<u>Amount in million €</u>
	<u>Period 2007-2013</u>
Structural Funds (ESF, ERDF, Cohesion Fund)	347 462,30
Transport Network	7 798,20
Pre-accession operations (IPA)	4 892,60
Energy project to aid economic recovery	3 832,60
EU satellite navigation programmes (EGNOS and Galileo)	2 684,40
Research related to transport & energy	1 860,70
Nuclear decommissioning	1 786,90
Solidarity Fund	1 172,20
Intelligent Energy-Europe programme	719,70
Programme for Employment & Social solidarity (PROGRESS)	578,60
Marco Polo II Programme	423,30
Social dialogue	277,80
European Globalisation Fund	184,30
Energy Network	157,60
Other (administrative expenditure, agencies and other actions individually below 150 MIO €)	4 198,30

378 029,50

Categorization SF : priority themes

Thematic area	Amount <u>allocated</u> as per Commission decision on programmes
Transport	75 609
Business support	59 465
Environment and Climate change	49 927
Employment and Social Inclusion	35 012
Human Capital, Education and Training	33 438
Research and Innovation	24 597
Information and communication technologies	11 548
Energy	11 037
Technical assistance	10 556
Urban development	10 212
Tourism	6 264
Culture	5 984
Health	5 244
Capacity building and Governance	4 814
The outermost regions	649
	<u>344 357</u>



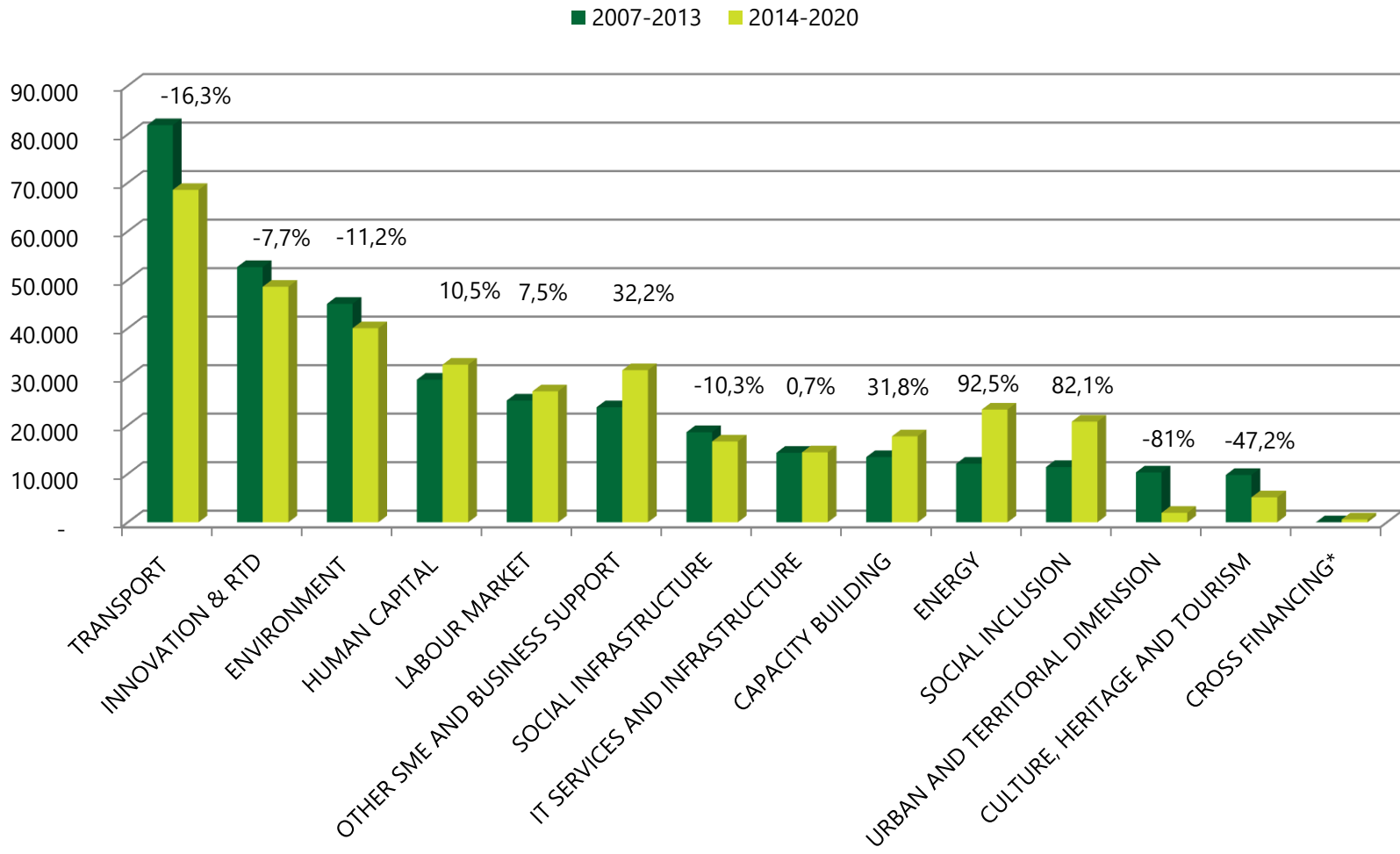
2014-2020 Cohesion Fund allocations

Major Thematic Areas

Major Thematic Areas	Decided OPs - million euro				Evolution (%)
	2007-2013		2014-2020		
	Amount	Weight	Amount	Weight	
1 TRANSPORT	81 864	24%	68 518	20%	-16,3%
2 INNOVATION & RTD	52 606	15%	48 562	14%	-7,7%
3 ENVIRONMENT	45 039	13%	39 995	11%	-11,2%
4 HUMAN CAPITAL	29 403	8%	32 479	9%	10,5%
5 LABOUR MARKET	25 110	7%	26 996	8%	7,5%
6 OTHER SME AND BUSINESS SUPPORT	23 715	7%	31 357	9%	32,2%
7 SOCIAL INFRASTRUCTURE	18 578	5%	16 666	5%	-10,3%
8 IT SERVICES AND INFRASTRUCTURE	14 329	4%	14 423	4%	0,7%
9 CAPACITY BUILDING	13 448	4%	17 725	5%	31,8%
10 ENERGY	12 072	3%	23 243	7%	92,5%
11 SOCIAL INCLUSION	11 393	3%	20 746	6%	82,1%
12 URBAN AND TERRITORIAL DIMENSION	10 281	3%	1 951	1%	-81,0%
13 CULTURE, HERITAGE AND TOURISM	9 759	3%	5 151	1%	-47,2%
CROSS FINANCING*	-	0%	590	0%	
TOTAL	347 597	100%	348 401	100%	0,2%

*Code 101 - Cross-financing under the ERDF (support to ESF-type actions necessary for the satisfactory implementation of the ERDF part of the operation and directly linked to it)

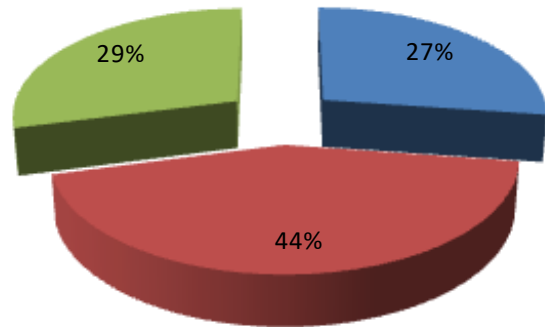
COMPARISON BETWEEN THE TWO PERIODS



TRANSPORT 2014-2020

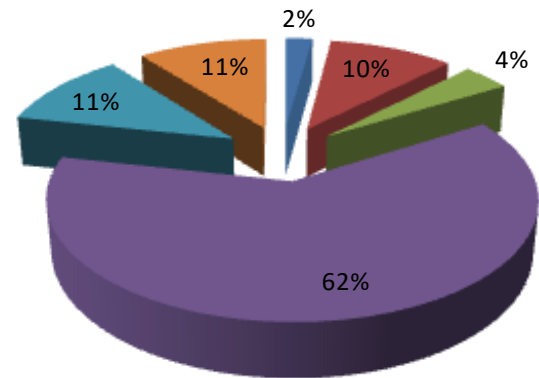
Transport 2014-2020

■ Rail ■ Roads ■ Other transport



Other transport

■ Airports ■ Ports
 ■ Waterways ■ Urban Transport
 ■ Multimodal Transport ■ Intelligent transport systems

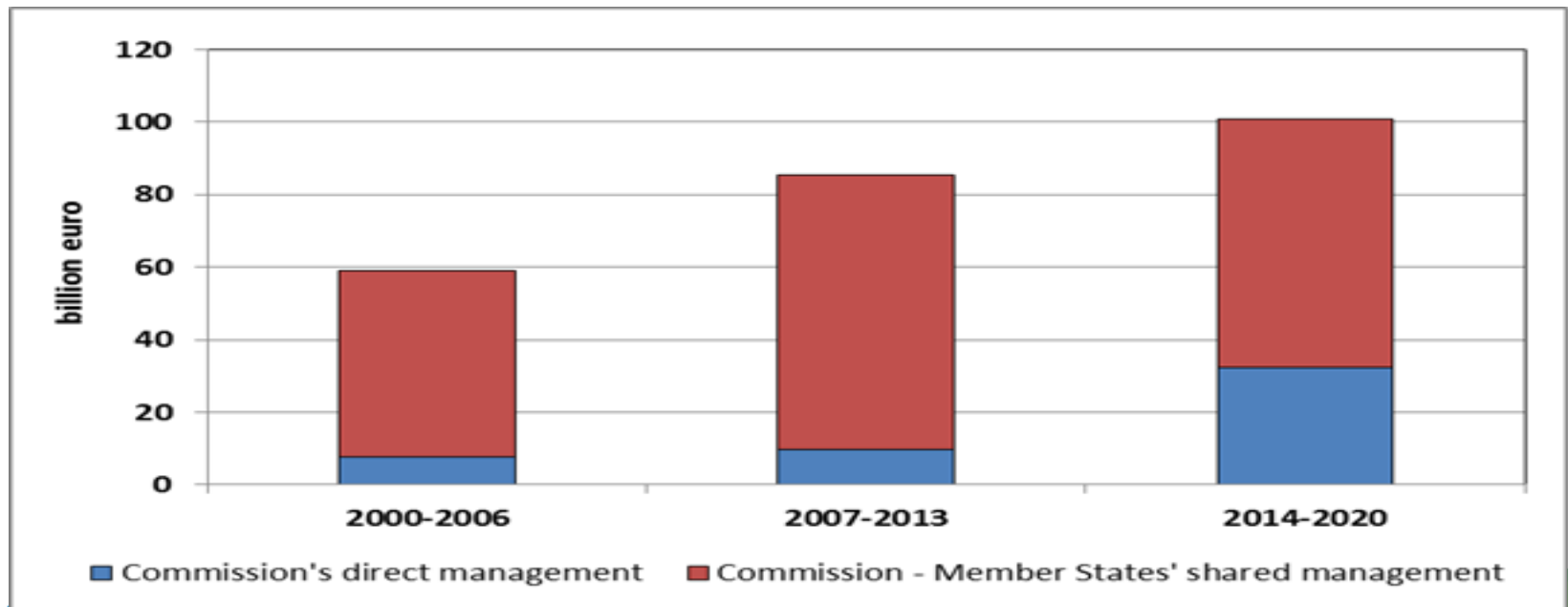


Area	2007-2013 million euro	2014-2020 million euro	Variance
Transport	81 864	68 518	-16%
Rail	23 540	18 663	-21%
Roads	41 976	29 950	-29%
Airports*	1 593	439	-72%
Multimodal transport (TEN-T)	332	1 236	272%
Intelligent transport systems	939	2 094	123%

*restricted to investments related to environmental protection or accompanied by investments necessary to mitigate or reduce its negative environmental impact

CONCLUSIONS

1. **More detailed categorisation of data** for 2014-2020 programming period: 2007-2013: 86 codes used for interventions versus 2014-2020: 123 codes
2. For the current period (2014-2020), the **highest allocations are assigned to Transport, Innovation & RTD and Environment.**
3. Areas with **the highest increase/decrease**: Energy: + 92,5%; Social inclusion: +82,1%; SME and Business Support: + 32,2% versus Urban and territorial dimension: - 81%; Culture, Heritage and Tourism: -47,2%
4. Caution when analysing data and figures: eg. transport:



Part Three

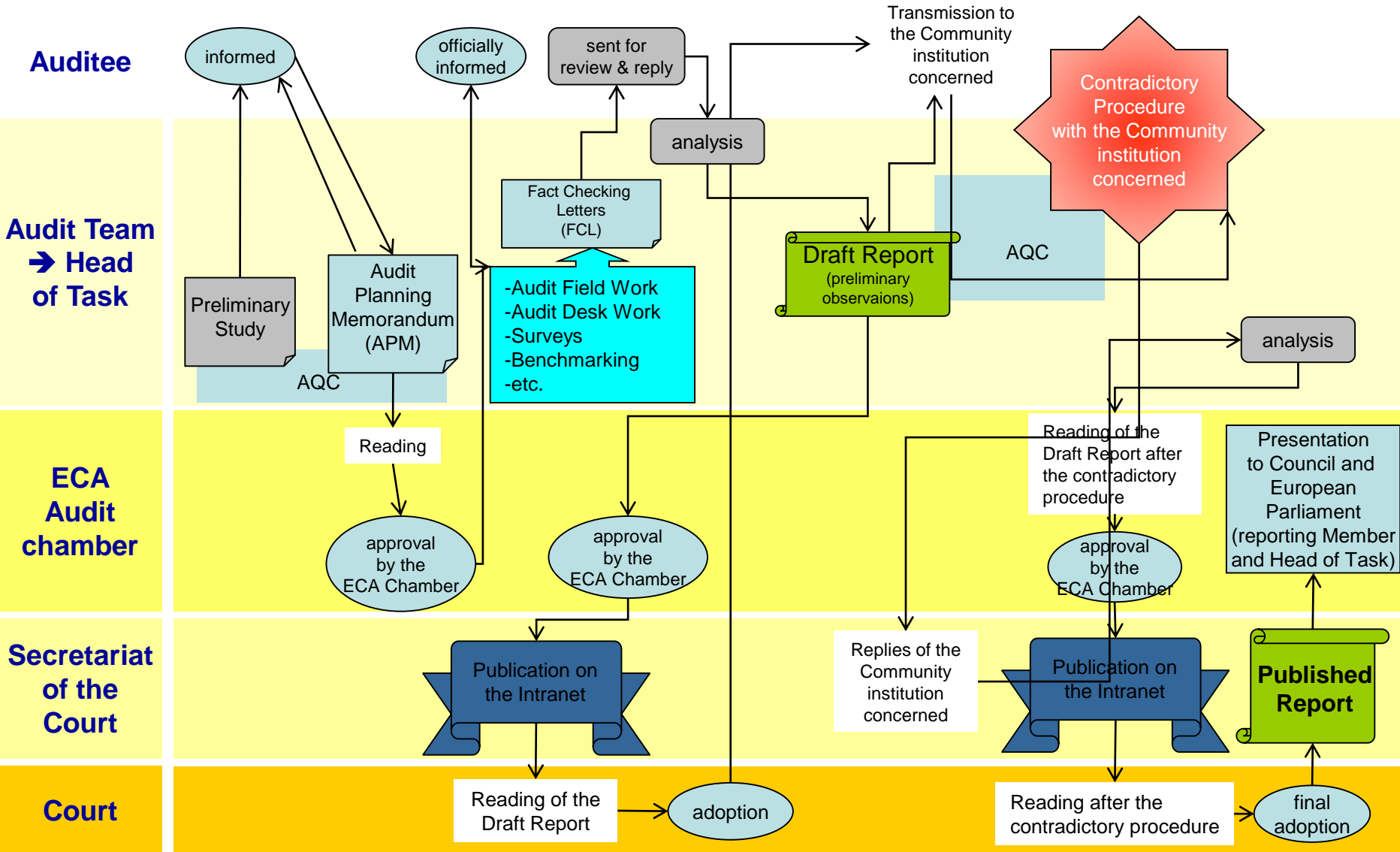
Planning: Making a study and assess risks (where can it go wrong)



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Performance Audit - Flow Chart

Adoption of a Special Report



Planning Phase

Examination Phase

Reporting Phase

Content

- 1) Purpose and extent of the study
- 2) Carrying out a study
- 3) Focus on risks identification and assessment



Purpose of the study

- To persuade hierarchy that a future performance audit is...
 - 1) **realistic**,
 - 2) **feasible**, and
 - 3) likely to be **useful**

- To provide a basis for planning the audit in terms of...
 - 1) **resources** needed(required skills, experts, data...)
 - 2) **timetable** (key milestones)
 - 3) **outline of the audit** (potential audit questions, criteria, evidence, methodology, scope, impact)

Carrying out the study (1/6)

- Acquire an up-to-date knowledge of the audit area:

WHY? What are the objectives and logic of intervention?

HOW MUCH? Resources available for this policy area?

WHO/WHEN? Who is responsible for what in each phase?

WHERE? Where are key monitoring and control info?

WHAT CAN GO WRONG? What are the main risks?

Carrying out the study (2/6)

WHY? What are the objectives and logic of intervention?

- Identify the **rationale** for public funding of such audit area (where is the market failure? Is it a public good to have...?)
- Question whether **objectives are SMART** (**S**pecific, **M**easurable, **A**chievable, **R**elevant, **T**imely) ...are objectives quantified? Is it clear what should be achieved? By when?
- Identify if there are **RACER indicators** (**R**elevant, **A**ccepted, **C**redible, **E**asy and **R**obust) ...are indicators relevant to the objectives? Are they simple enough?

Carrying out the study (3/6)

HOW MUCH? → Resources available for this policy area?

- Analyse the **budget** set for this policy area: is it allocated? committed? paid? → ...**delays** are a signal of implementation difficulties; checking the reasons for such delays can highlight some of the potential future audit findings
- Identify the **human/administrative resources**: are they sufficient? Try to compare their cost to the budget managed!

Carrying out the study (4/6)

WHO/WHEN? Who is responsible for what in each phase?

- Determine the respective responsibilities of the various actors (**accountability**), especially in shared management
- Identify the **key actors** (who fixes the eligibility and project selection criteria? Who selects the projects? Who is making the payments? How/when is the management involved?)

...this would allow you to know who you should interview during the audit

Carrying out the study (5/6)

WHERE? Where are key monitoring and control info?

- identify your **information sources** (data from previous audits, legislation, scientific studies, official statistics, annual activity or control reports of the auditee, manuals...)
- Identify if/where **monitoring data are available** (check manuals, internal guidelines, databases, minutes of selection committees)
- compare critically **different viewpoints** and **discuss with auditees** (interview people at different levels)
- Consider the **IT systems** (who has access to them? How often are they updated?) ...but **be aware of your access rights**... you are not yet in the audit phase!

Carrying out the study (6/6)

WHAT CAN GO WRONG? What are the main risks?

→ focus on RISKS...

Focus on risks identification and assessment (1/7)

Concept of risk

- **Possibility** of loss or injury; a **threat** of something going wrong
- **Definition:** *"An incident or the occurrence of a particular set of circumstances that, if they occur, could adversely affect the achievement of objectives of an organisation"*
- **EC definition:** *"Any event or issue that could occur and adversely impact the achievement of the Commission's political, strategic and operational objective."* (Source: Risk Management in the Commission – guide 2006)

Focus on risks identification and assessment (2/7)

Risk analysis

- the **significance** of the risks
- the **probability** of occurrence
- the **likely impact** if the risk materializes
- the **auditee's strategy to mitigate** such risks

Focus on risks identification and assessment (3/7)

Risk factors

- **Nature and complexity** of the policy, programme, operations
- Diversity, consistency and **clarity of objectives**
- Existence and use of appropriate **performance measures**
- Availability of **resources to mitigate risks**
- Complexity of the organisation structure and **clarity of responsibilities**
- Existence of **quality and control systems**

Focus on risks identification and assessment (4/7)

Particular risks in relation to the three "E"

- **Economy** (e.g. waste, gold-plating)
- **Efficiency** (e.g. leakages of input resources; unhealthy ratio input-output)
- **Effectiveness** (e.g. design of intervention does not take into account actual need; objectives too wide and unmeasurable)

Focus on risks identification and assessment (5/7)

Typical risks in relation to **Economy**:

- The tender procedures applied by the national authorities do not ensure that the best results are obtained and thus more and/or better quality of products could be purchased
- The IT equipment, software and IT services are not purchased at the best price due to weak procurement procedures
- Costs are not minimised because of the standard costs or price lists fixed by local authorities and not regularly updated in times of crisis

Focus on risks identification and assessment (6/7)

Typical risks in relation to **Efficiency**:

- The absence of clear regulatory definitions and selection criteria by Member States does not ensure that the aid is targeted to the most needed investment projects, with weak CBA analysis
- The regulatory framework and the system's implementation weaknesses result in food being over-produced and wasted
- The cost of energy saved by energy efficiency projects was not a determining factor in project selection criteria

Focus on risks identification and assessment (7/7)

Typical risks in relation to **Effectiveness**:

- Poor strategy: unclear or untargeted analysis of needs, absent or inconsistent priorities resulting in investments not achieving the set objectives
- E-Government projects fail at simplifying procedures or adding any value (time, better service) to service providers and users
- Infrastructure built could become obsolete rapidly if not upgradeable or not maintained

Part Four

Outlining the performance audit plan



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Agenda

- 1) The Audit Planning Memorandum
- 2) Audit tools
- 3) Evidence Collection Plan



The Audit Planning Memorandum

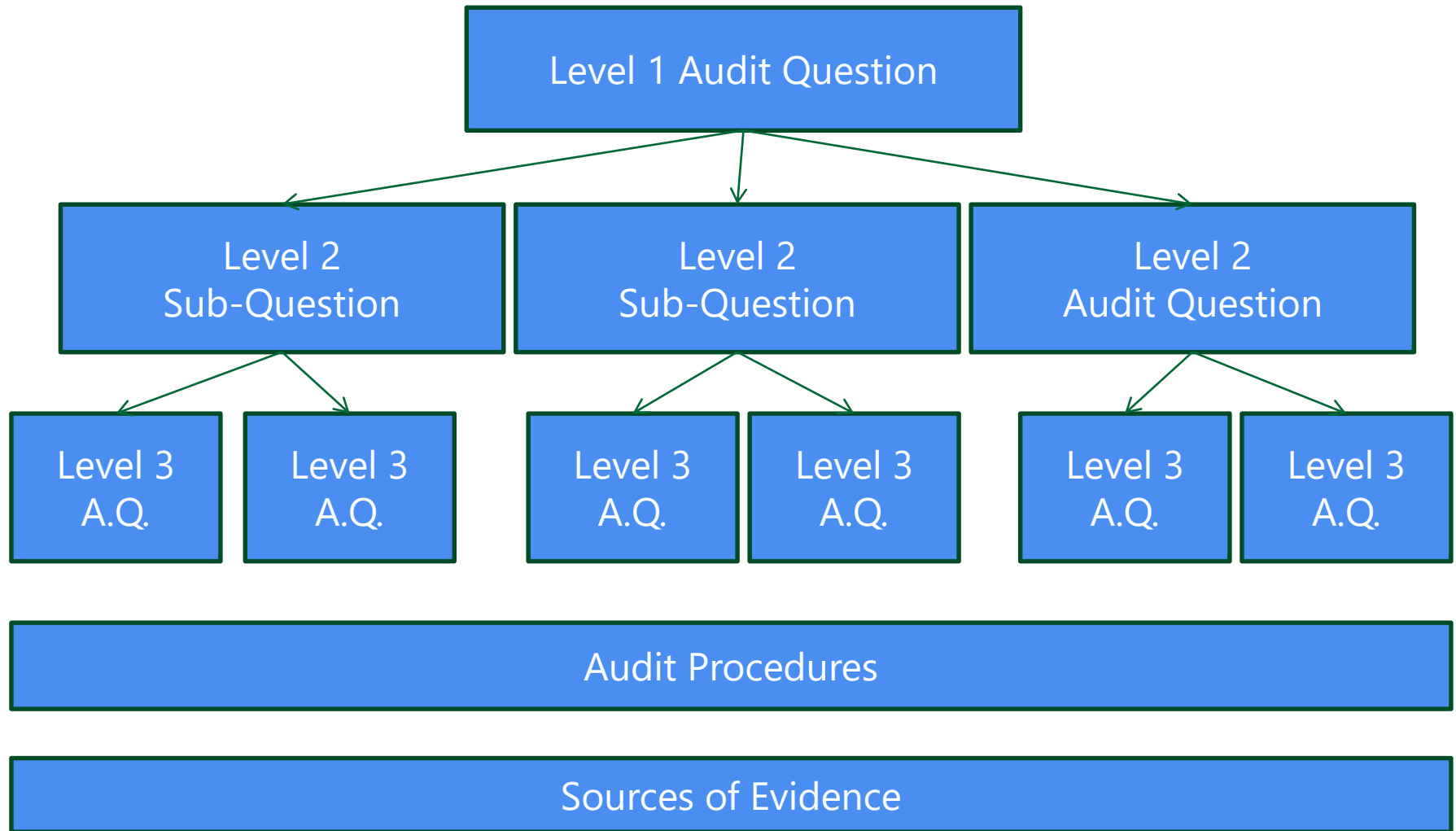
1. Audit questions
2. Audit scope
3. Audit criteria
4. Audit evidence and sources
5. Audit methodology
6. Audit potential conclusions and recommendations
7. Audit timetable, resources and quality arrangements
8. Communication with auditee

The Audit Planning Memorandum (1/9)

1. Audit questions

- Based on preliminary study
- Preferably one question but possibly two or three questions **collectively exhaustive and mutually exclusive**
→ **pyramid structure**
- Questions should be **relevant** (related to a risk) and **auditable** (answerable)
- Make clear the **level of analysis** (e.g. the system or the projects' performance)

The Audit Planning Memorandum (2/9)



The Audit Planning Memorandum (3/9)

2. Audit scope

- Defines the **boundaries** of the audit:
 - **WHAT** programme, measure, budget line...
 - **WHO** will be audited: Commission, MS, beneficiaries...
 - **WHERE**: which MS, regions...selected on what basis?
 - **WHEN**: the time period to be covered
- Is the scope **too wide** for:
 - your resources?
 - your skills?
 - the timeframe?
- Consider need to improve focus to be relevant

The Audit Planning Memorandum (4/9)

3. Audit criteria

- Standards to use to assess performance or observations
- Need to be objective, relevant and reasonable
- Derived from recognised sources
- Objective
- Relevant
- Reasonable
- Obtainable
- Agree criteria with auditee

The Audit Planning Memorandum (5/9)

4. Audit evidence and sources

- Rigorous analysis of audit questions to identify evidence required, its source and availability (from third parties?)
- Evidence needs to be:
 - **Sufficient** to enable answering the audit questions
 - **Relevant** to address the audit questions
 - **Reliable** in terms of impartiality and objectivity
- Consider how the evidence will be presented in final audit report

The Audit Planning Memorandum (6/9)

5. Audit methodology → «tools» to use

- Various quantitative and qualitative methods can be used in performance audits, depending on the audit questions; eg.

- Modelling
- Counterfactual
- Benchmarking
- Cost Benefit Analysis
- Surveys
- Focus Groups
- Hypothesis testing
- Case Studies
- Interviews
- File Review

The Audit Planning Memorandum (7/9)

6. Likely outcome and impact of the audit

- Consider likely observations and recommendations **leading to change → SO WHAT?**
- Remember all three 'E's
- Consider **timing** - programme planning

The Audit Planning Memorandum (8/9)

7. Audit timetable, resources and quality arrangements

- A realistic plan is needed: allow some buffers
- Consider need for internal/external expertise
- Specify reviewers and quality controls
- Consider external deadlines (e.g. new regulation in the field, closure of a financial programming period)

The Audit Planning Memorandum (9/9)

8. Communication with the auditee

- No surprise approach - communicate the plan to the auditee and allow for brief discussion
- Agree the audit criteria with the most senior member of the auditee that is possible!
- Better communication, improved working relationship
- Plan for further communications with auditee during the course of the audit

Audit tools

- Interviews
- Inspections
- Observations
- Enquiries

- Focus groups
- Surveys
- Experts panels and consultants
- Benchmarking



Focus Groups



What are focus groups?

Focus group interviewing is:

- an organised discussion with a selected group of individuals to gain information about their views and experiences of a topic
- particularly suited for obtaining several perspectives about the same topic

Main **objective** is to draw upon respondents' attitudes, feelings, beliefs, experiences and reactions in a way in which would not be feasible using other methods.

Benefits

- Gaining insights into people's shared understandings of everyday life or situations
- Allows observation of how individuals react to the opinions of others
- Obtains information about why certain issues are important and what it is that makes them important

Disadvantages

- Difficult to distinguish the individual view from the group view
- Difficult sometimes to get practical arrangements "right"
- Important to use a good facilitator/moderator

Surveys

wertung

- Sehr gut
- Gut
- Befriedigend
- Ausreichend
- Mangelhaft



Purpose of Survey

- Why do you need a survey?
- What ***specific new*** information will it generate?
- What benefit will be gained?

Conducting the survey

- Questionnaire design
- Testing the questionnaire
- Fieldwork
- Collection of data

Use of experts and consultants



Purpose

Range of opportunities including:

- Providing expert opinions (mainly technical expertise; eg. forecasting)
- Help in applying specific methods e.g. Surveys or cost analysis
- Or carrying out work in a remote location in support or instead of the audit team

Consultants: issues to consider

- Involve ECA procurement staff at early stage
- Have clear objectives for the consultant's work
- Identify areas where your help will be needed by consultant
- Seek fixed or capped pricing for delivery of specific outcomes
- Develop knowledge of market rates and negotiate accordingly
- Identify contract manager
- Control contract scope
- Integrate consultant input with teams' input

Benchmarking

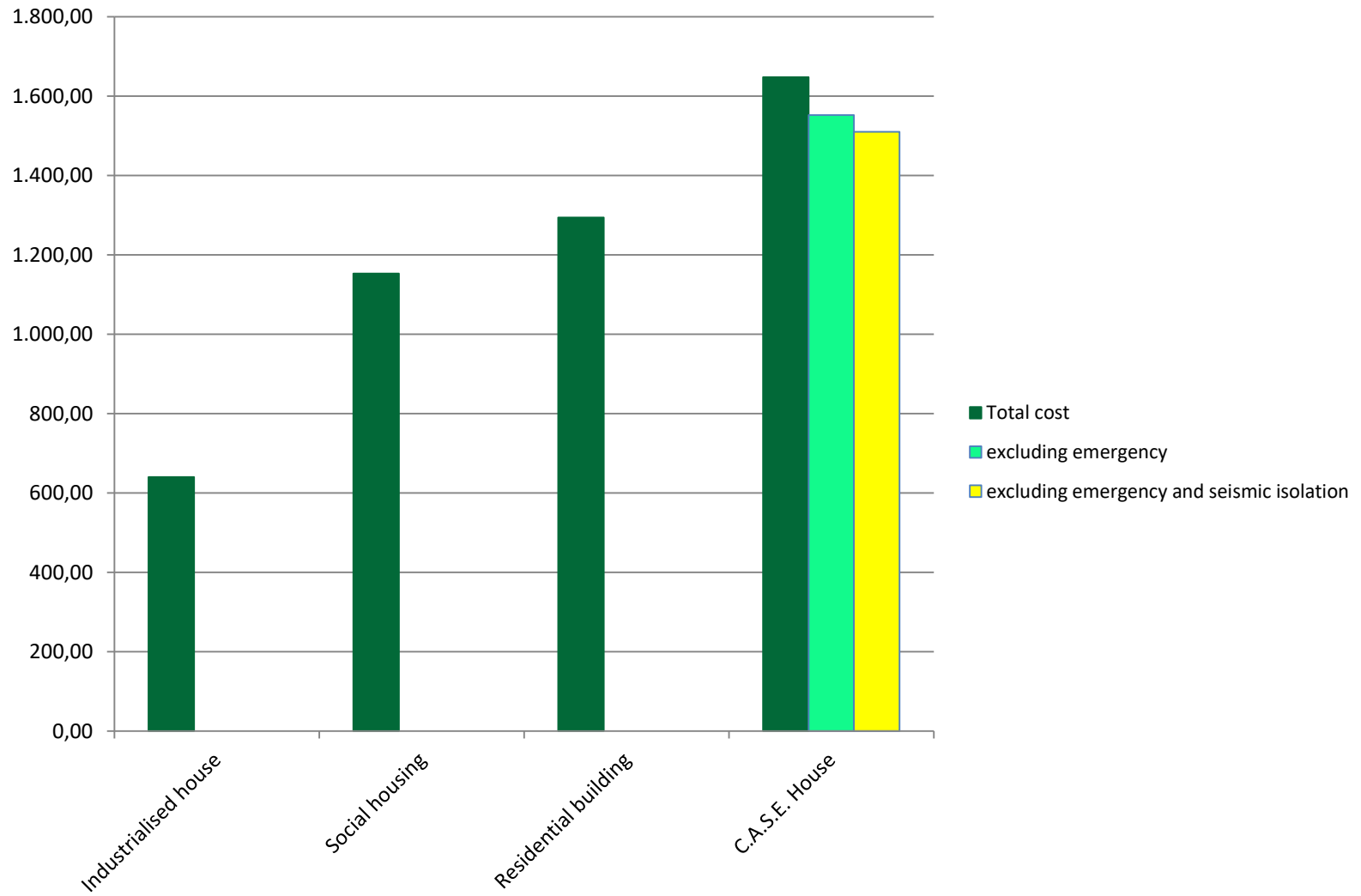


Benchmarking: purpose and important issues

Based on the principle of measuring the performance of one organization or project against a standard; used to

- Assess performance objectively
 - Expose areas where improvement is needed
 - Identify best practice
 - Test whether improvement programmes have been successful
-
- Discuss and confirm benchmark criteria with auditee
 - Determine data collection method, collect data and analyse the performance gap

Benchmarking: Cost of temporary houses (C.A.S.E.)



The Evidence Collection Plan

- It is an **annex** to the Audit Planning Memorandum but considered the KEY document in performance, detailing the:
 - Audit (sub-)questions
 - Audit criteria
 - Evidence
 - Evidence sources
 - Data collection methods
 - Data analysis methods

EVIDENCE COLLECTION PLAN

Audit Questions	Level 2 questions	Level 3 questions	Level 4 questions	Criteria	Evidence	Evidence Sources	Data collection Methods	Data analysis Methods
WHAT DO WE WANT TO KNOW?				WHAT STANDARD DO WE MEASURE AGAINST?	WHAT EVIDENCE WILL ANSWER THE QUESTION?	WHERE ARE WE GOING TO GET THE EVIDENCE?	HOW ARE WE GOING TO GET THE EVIDENCE?	WHAT WILL WE DO WITH IT ONCE WE GET IT?
- Answers can be yes, no, yes but or no but. - Answerable - Logical				- Legislation, regulations, professional standards	- Facts (numerical evidence; descriptive evidence, qualitative information) - Experiences / Perceptions / Opinions	- The entity, other public entities, published research, beneficiaries, suppliers, interest groups	- <i>In person</i> (observation, examine documents, interviews, focus groups) - <i>By post, telephone, e-mail</i> (request documents, questionnaires) - <i>Sample surveys</i> (which could be either in person or by post, e-mail) - <i>Benchmark</i> against comparable entities	- Quantitative evidence (e.g. trends, comparisons, ratios) - Qualitative evidence (coding, matrices) - Systems analysis (e.g. flowcharts) - Case studies
				Standards, measures or results				
				commitments of auditee				
				- Performance of comparable organisations, best practice, or standards developed by auditor				

APM output

- A key planning document **summarizing the proposed audit outline** (describing the audit area, objectives, budget, main actors, main risks + possible audit questions / criteria / evidence / methodology / scope / impact)
 - State **likely conclusions, recommendations and impact** (at the time of publication of the audit report!)
 - Sometimes a concise, short, accessible **presentation** to the Member responsible and the Chamber
- enabling your hierarchy and the CH to decide whether an audit is **realistic, feasible and likely to be useful**

Part Five: FINDINGS TO REPORT

AN EXAMPLE:
EU-funded **airport**
infrastructures:
poor value for money
(SR n. 21/2014)



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Contents

Audit scope and coverage

Audit questions

Audit findings for a few airports

Further analyses and graphs

Summary of the audit findings

Impact of the report

Key data on the audit and lessons learned

Audit scope and coverage

- ✓ **Coverage: 5 MSs** representing **78%** of 2000-2013 Cohesion policy funds allocated to airport infrastructure
- ✓ **Sample of 20 airports:** the unit of analysis was the airport (to consider the impact of co-funded investments on airport sustainability)

MSs	EU investments (<u>completed</u> projects)	Total N° of sampled airports	<i>N° of airports with CF/Major Projects</i>	<i>N° of airports with ordinary ERDF Projects (see APM for methodology)</i>
Spain	645 M€	8	3	5
Italy	305 M€	5	1	4
Greece	191 M€	3	1	2
Estonia	66 M€	2	1	1
Poland	34 M€	2	0	2
TOTAL	1233 M€	20	6	14

Sampling methodology

➤ N° of airports per MS:

- for objectivity reasons **at least 2 per country**;
- **in line with materiality** (except for Spain, whose spending represented >50% of total EU-27 spending, to avoid focusing too much on Spain) → 8 airports selected for audit in Spain, 5 in Italy, 3 in Greece, 2 in Poland and 2 in Estonia.

➤ Selection of the airports:

- **All 6 Major Projects** and Cohesion Fund projects were selected to assess EC mgmt
- **5 “risky”** airports selected based on preliminary information on their unsustainability, non-operation or too close to others or to high-speed rail lines
- **5 randomly**-selected airports, avoiding to select >2 airports in the same region and avoiding islands (accessibility justification)
- **4 most material** airports among the remaining airports in the population

Audit questions

1) Were the airport investments **needed and well planned**?

Assessing design and planning:

- strategic long term development plans; airport master plans, catchment area analysis
- coordination of investments with nearby airports
- needs assessments, objectives, CBAs and proportionality of investments

2) Were the airport investments **well managed**?

Assessing EC and MS/MA management:

- selection criteria aligned with transport policy and cost-effectiveness principles
- vertical/horizontal coordination (EC/MSs)
- EC guidance, supervision and corrective actions

3) Were the airport investments **cost-effective**?

Assessing investment outputs, use, results and impact:

- Planned physical output achieved without time/cost overruns and in use?
- Expected quantitative improvements/qualitative benefits?
- Efficient investments (cost per additional passenger) contributing to the financial sustainability of the airport ?

Anticipated impact on hinterland connections and on regional economy

Further in-depth analyses (1/5): airport catchment areas

An airport makes sense when it can attract a sufficient number of passengers (residents + tourists) and airlines to fly there...

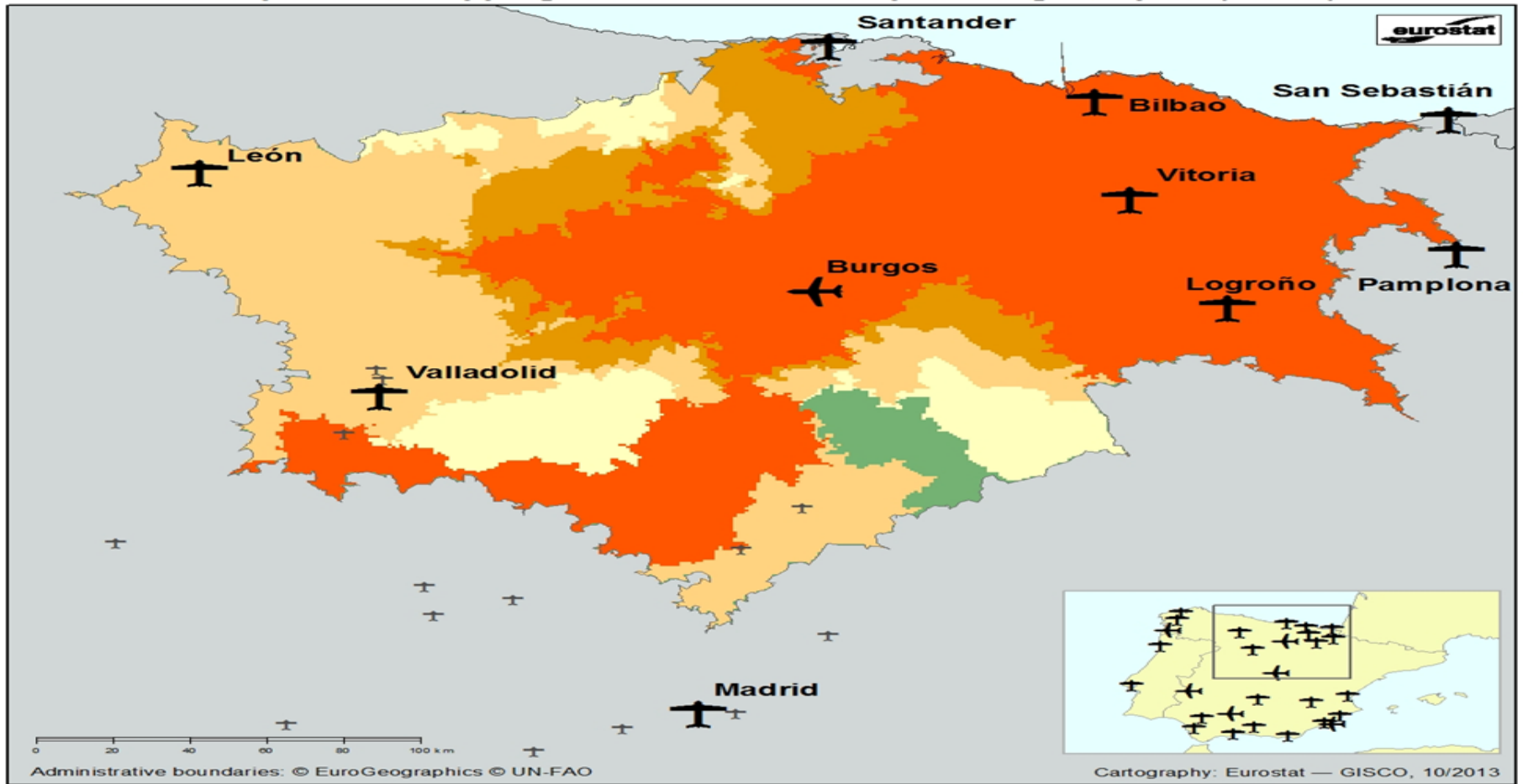
→ to substantiate the issue of « **too many airports too close to each other** » we tried to visualize the phenomenon with the collaboration of Eurostat:

- establishing a **2 hours-drive from the audited airport** as definition of airport **catchment area**
- calculating the **number of residents and tourists** (hotel nights as proxy) in the airport catchment area
- identifying the **overlaps with the catchment areas of nearby competitor airports** (minimum 15.000 passengers/year)

→ Impressive findings: although accessibility was claimed as the main reason for investing in regional airports **82%** of the 61 million residents living with 2 hours from the 20 audited airports **have already access to at least another airport within 2 hours!**

→ **For 11 out of 20 audited airports 97% of residents have access to at least another airport within 2 hours drive...** even 5 airports if you live in Burgos! → see next slide

Number of airports overlapping with the audited airport Burgos, Spain (LEBG)



Legend

- 2 hour travel time from audited airport
- Audited Airports
- Competitor Airports
- Non-competitor airports

Number of Overlapping Airports

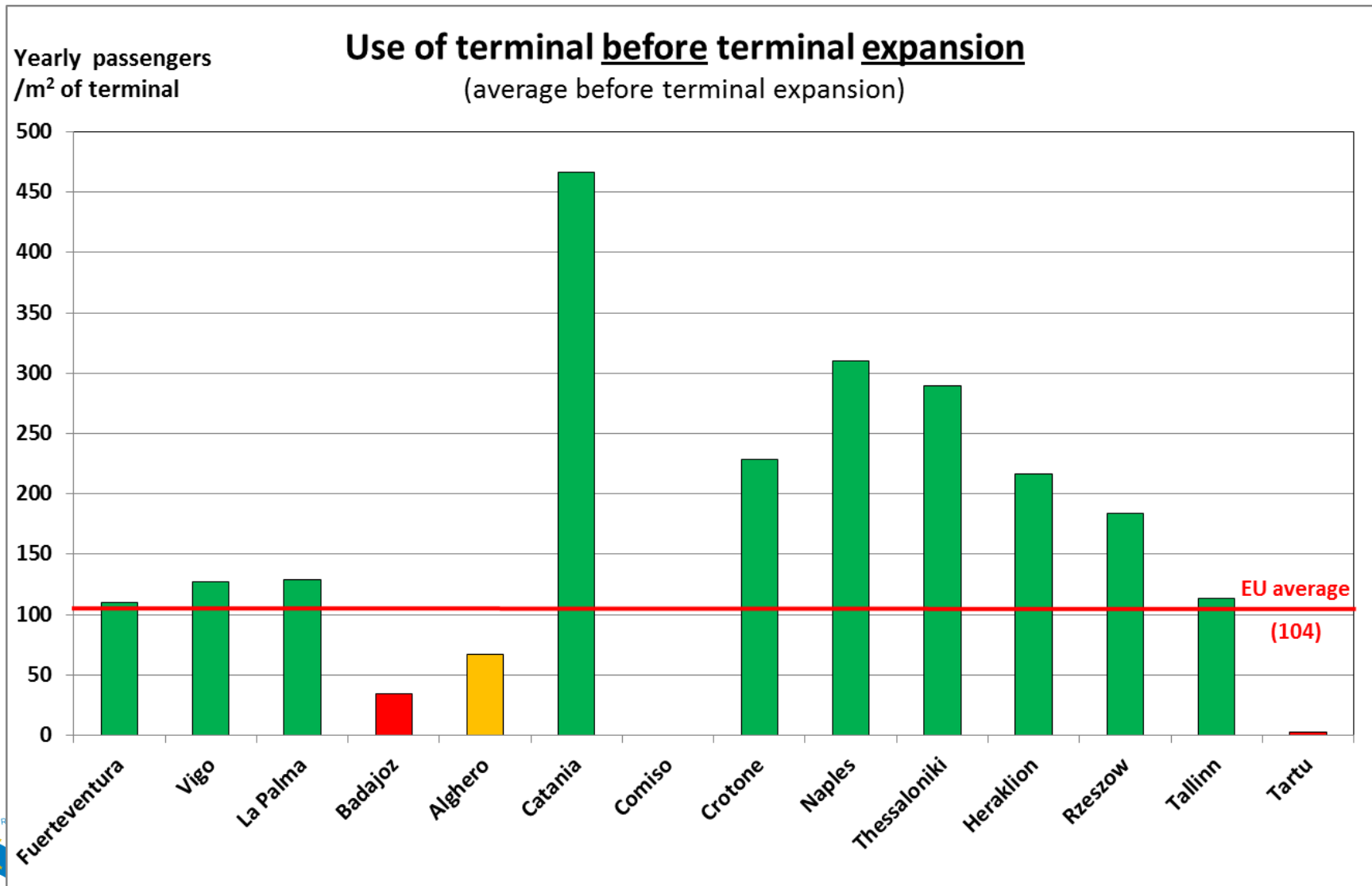
- No Overlaps
- 1
- 2
- 3
- 4 >
- Country Border

Burgos (LEBG) overlap with airport (ICAO code)	No of residents in the overlap area per airport	Residents in overlap (%)	Distance to competitor airport (km)	Time to competitor airport (minutes)	
Bilbao (LEBB)	2 987 330	73.59	150	90	
León (LELN)	1 056 690	26.03	184	105	
Madrid Barajas (LEMD)	148 291	3.65	237	151	
Pamplona (LEPP)	2 523 380	62.16	194	124	
Valladolid (LEVD)	1 220 930	30.08	140	96	
Vitoria (LEVT)	3 047 830	75.08	114	70	
Santander (LEXJ)	2 721 210	67.04	153	122	
San Sebastián (LESO)	2 549 690	62.81	226	126	
Lograno (LERJ)	2 835 972	69.86	120	85	
No of residents within 2 hours from audited airport	Total no of residents in overlap with access to multiple airports	Residents in overlap with access to multiple airports (%)	Distance to rail station (km)	Distance to rail line (km)	No of tourist nights within 2 hours from audited airport
4 059 290	4 048 972	99.75	0.52	0.23	17 913 871

Source: Eurostat Population (2006) and Tourism data (2006/2010)

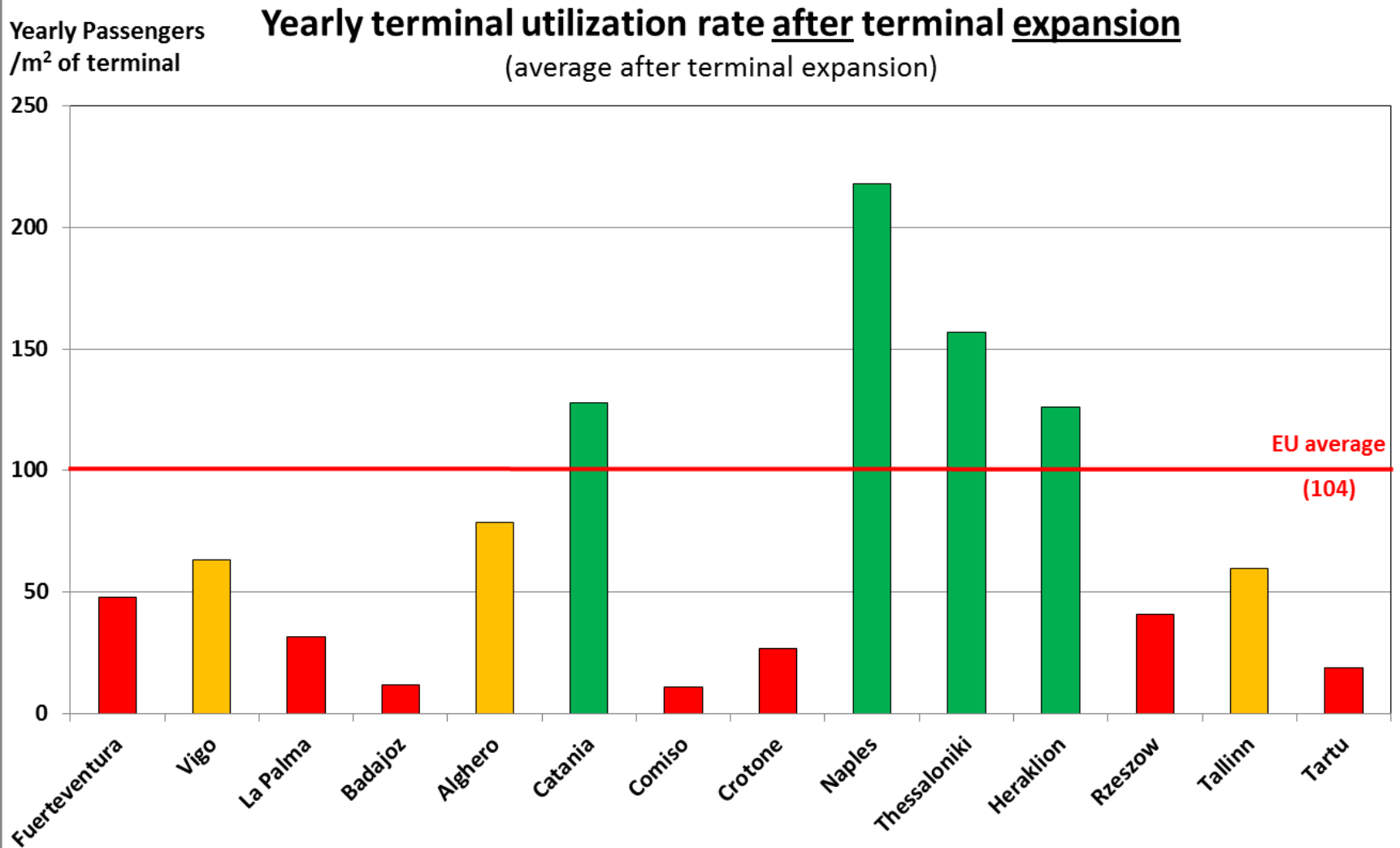
Further in-depth analyses (2/5): use of built infrastructure

For most terminals some expansion was needed



Further in-depth analyses (2/5): use of built infrastructure

...but most new terminals were built **so over-sized that remain severely under-used**

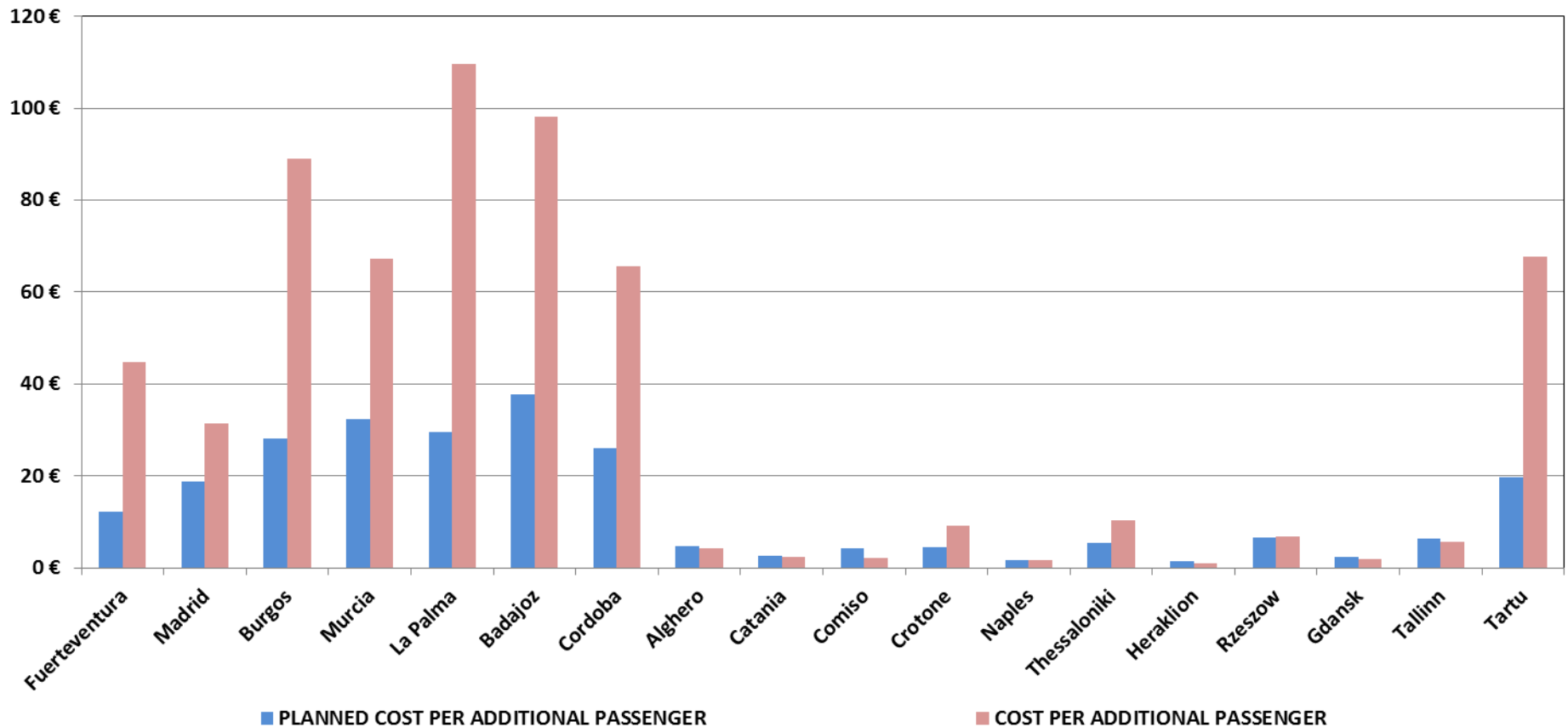


Further in-depth analyses (3/5): cost-effectiveness

Real cost per additional passenger was often the double than planned

(just infrastructure investment cost, not including many hidden costs (subsidies to airlines, State-paid control tower staff, police, firemen...))

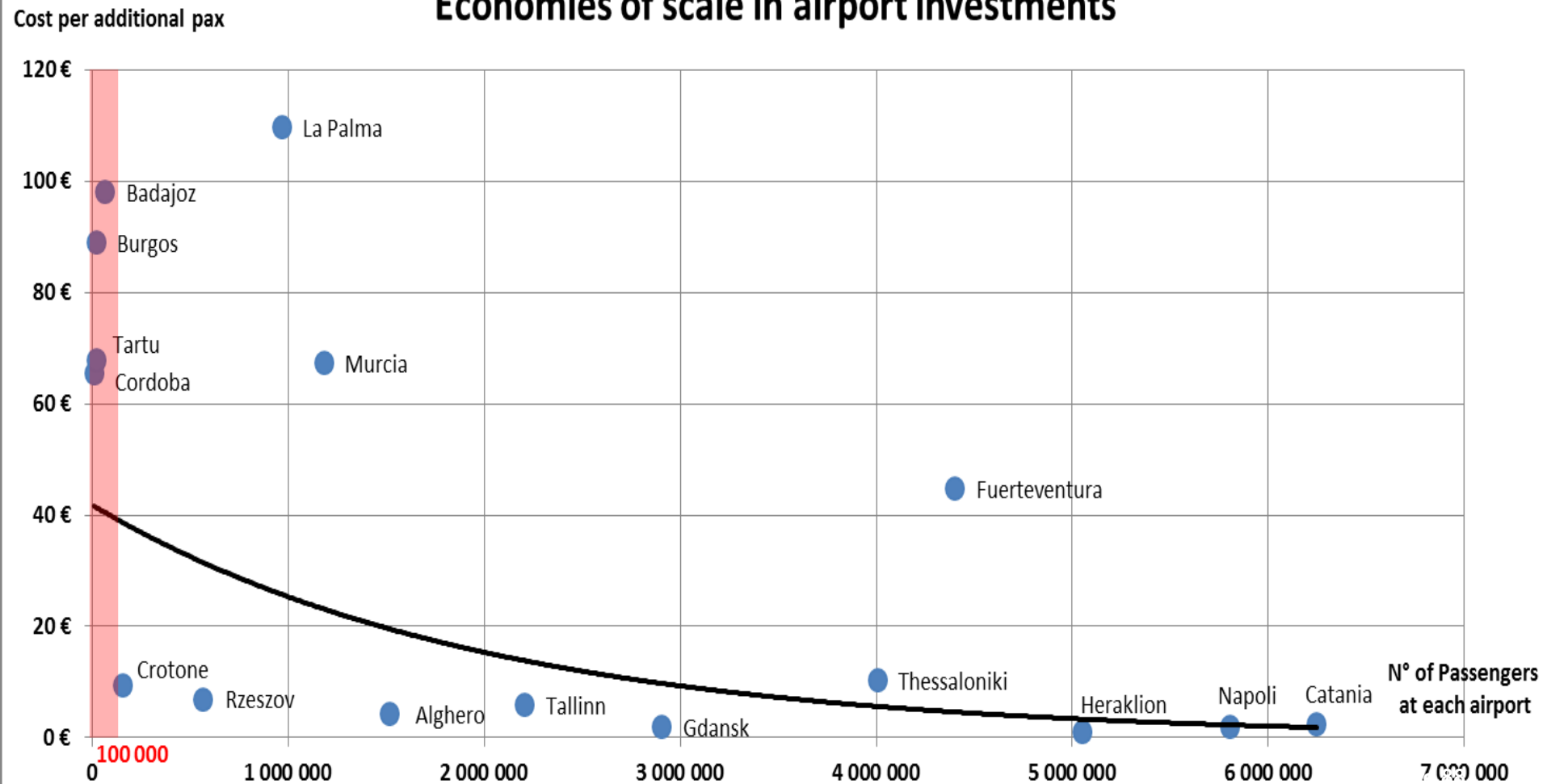
Cost per additional passenger
(in the 20 years after the main investment)



Further in-depth analyses (3/5): cost-effectiveness

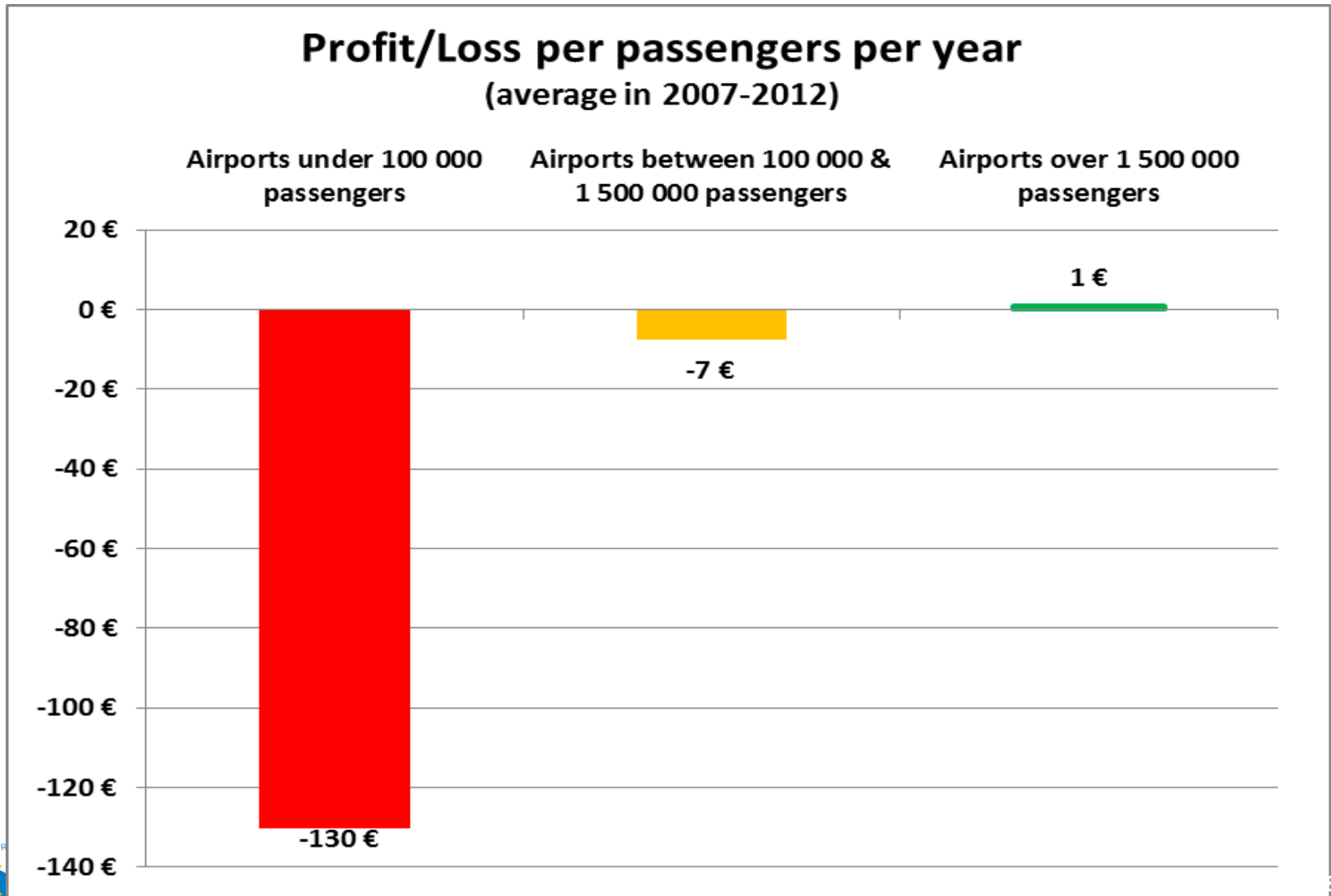
Reaching **critical mass** is vital to be able to spread high fixed costs on a sufficiently large number of passengers

Economies of scale in airport investments



Further in-depth analyses (4/5): financial sustainability

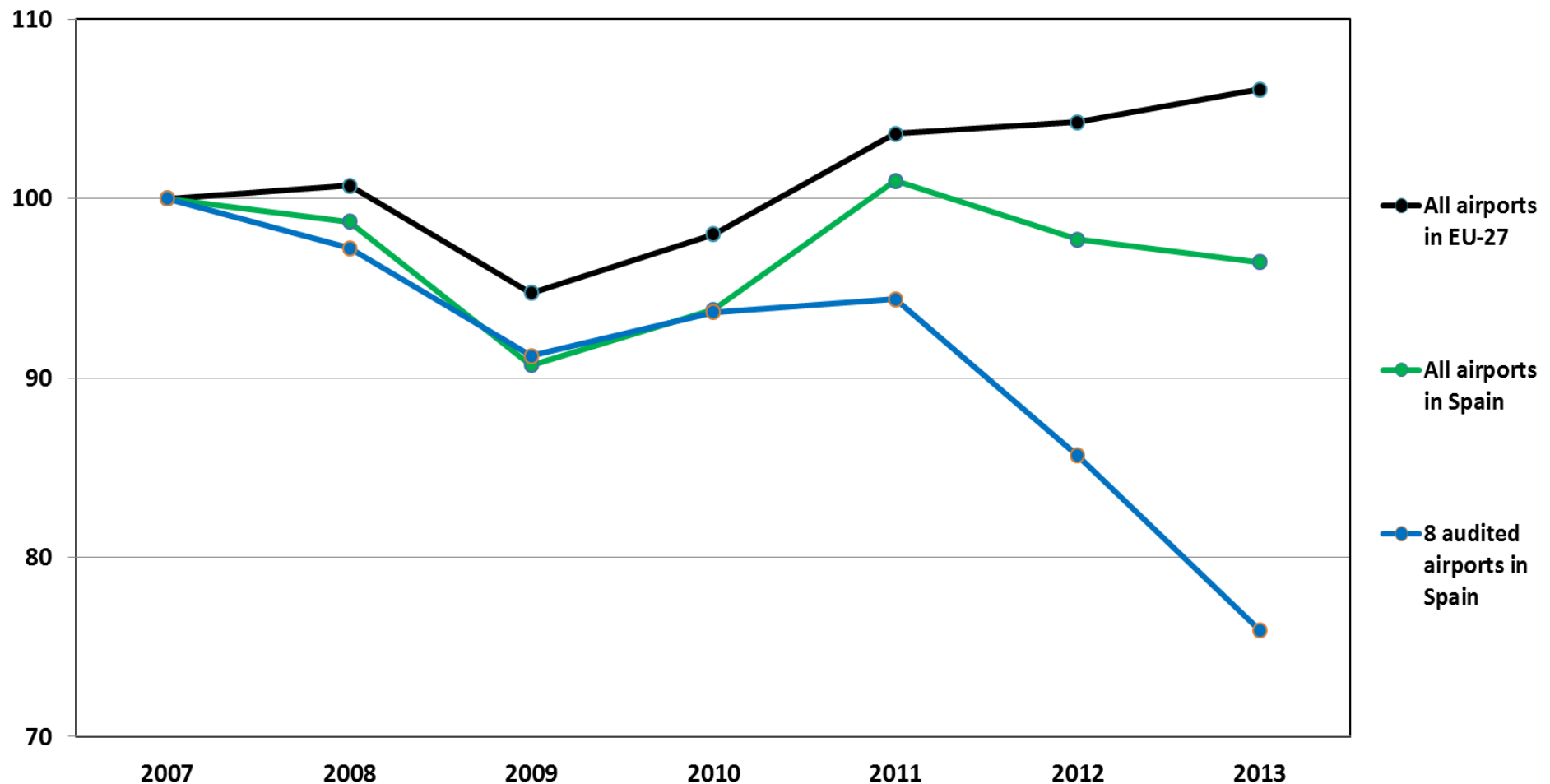
The consequence of too many small airports too close to each other is **a lot of losses**



Further in-depth analyses (5/5): crisis effect

Crisis had limited effect on the airport sector, many (Spanish) airports were built far too big and would remain under-used even with no crisis (e.g. Madrid-Barajas tripling surface)

Passenger trends of audited airports compared to all airports in Spain



Airport Madrid-Barajas

Automated People Mover (APM)

- EU-funding: 41,2 M€/98 M€
- Catchment area analysis ECA: 13,78 % overlaps
- Passengers (2012) 45,1 million
- Quantitative improvements? No
- Qualitative benefits? No
- Sustainability: loss making but..
- Impact on GDP: No*
- Better connections: Yes
- Assessment: **No modular growth applied; terminal space underused and no need for APM**

Picture of APM



Some examples: Airport Fuerteventura

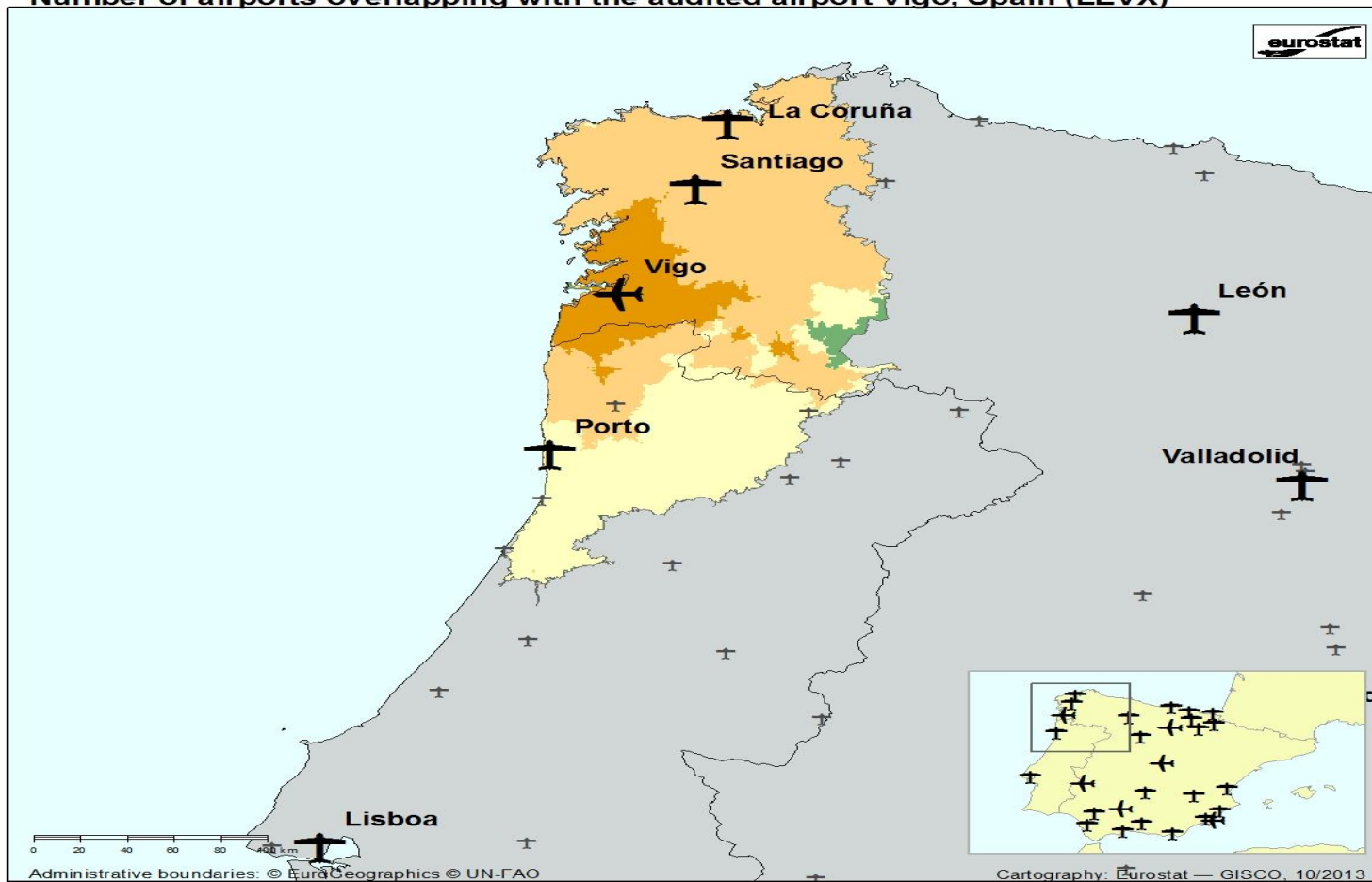
~~Investments in terminal, runway,
apron, other~~

~~Picture of closed part of terminal~~

- EU-funding: 83,8 M€/135 M€
- Catchment area analysis ECA: NA (= single island airport)
- Passengers: 4,4 million (2012)
- Quantitative improvements? No
- Qualitative benefits? No
- Sustainability: moderate
- Impact on GDP: No
- Better connections: No
- Assessment: oversized terminal and control tower + unused cargo field; money wasted for converted taxiway & increased n° of bus parkings



Number of airports overlapping with the audited airport Vigo, Spain (LEVX)



Administrative boundaries: © EuroGeographics © UN-FAO

Cartography: Eurostat — GISCO, 10/2013

Legend

- 2 hour travel time from audited airport
- Audited Airports
- Competitor Airports
- Non-competitor airports
- Number of Overlapping Airports**
- No Overlaps
- 1
- 2
- 3
- 4 >
- Country Border

Vigo (LEVX) overlap with airport (ICAO code)		No of residents in the overlap area per airport	Residents in overlap (%)	Distance to competitor airport (km)	Time to competitor airport (minutes)
La Coruña (LECO)		2 431 790	39.45	137	83
Santiago (LEST)		3 316 240	53.79	93	57
Porto (LPPR)		4 658 720	75.57	128	77
León (LELN)		411	0.01	328	234
Lisbon Portela (LPPT)		527	0.01	439	226
No of residents within 2 hours from audited airport	Total no of residents in overlap with access to multiple airports	Residents in overlap with access to multiple airports (%)	Distance to rail station (km)	Distance to rail line (km)	No of tourist nights per year within 2 hours from audited airport
6 164 630	6 159 440	99.92	3.02	2.98	19 166 393

Sources: Eurostat Population (2006) and Tourism data (2006/2010)



Airport Vigo

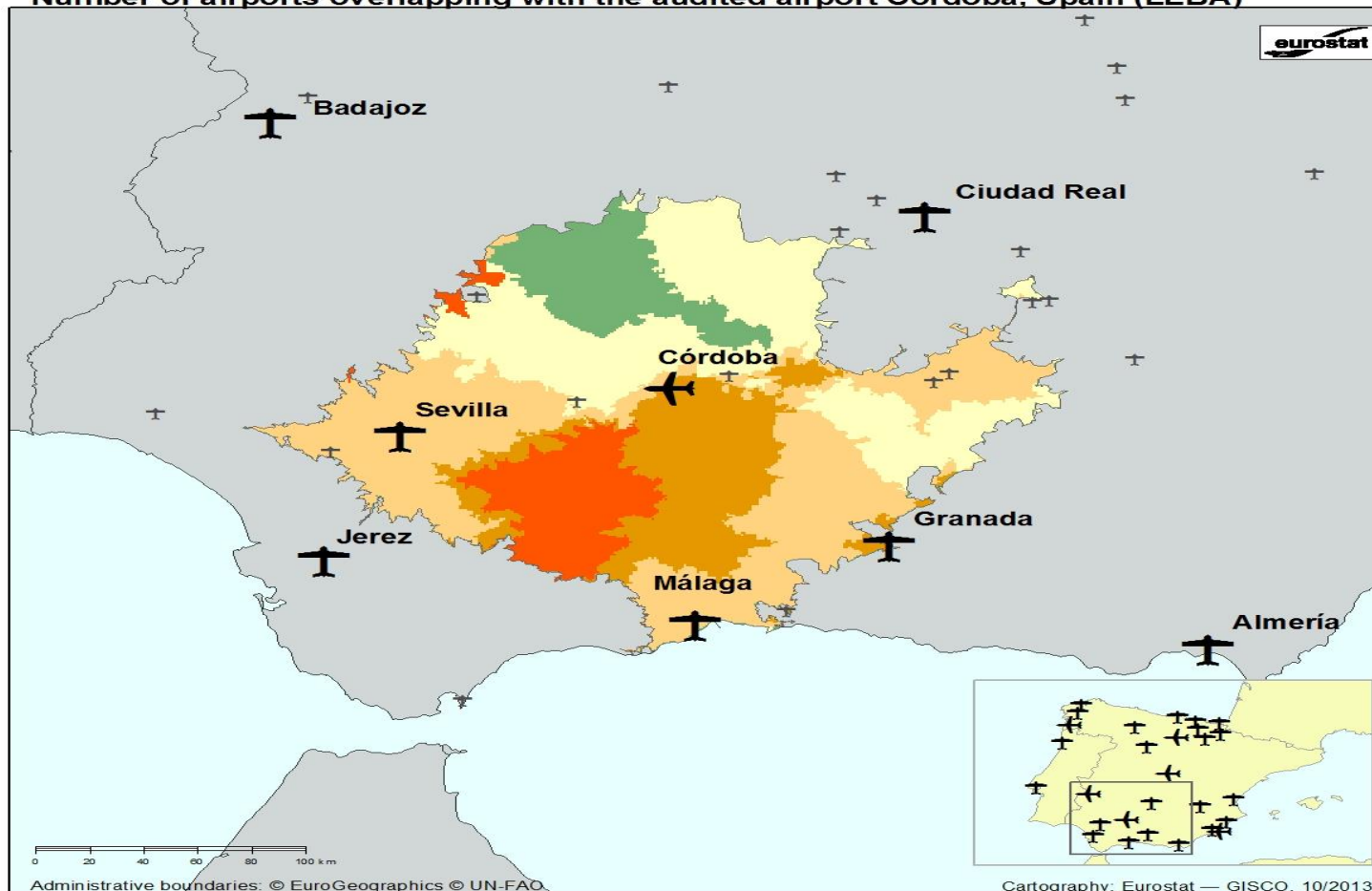
~~Investments in terminal, runway, apron, other~~

Picture of empty apron



- EU-funding: 8 M€/55,6 M€
- Catchment area analysis ECA: 99,92 % overlaps
- Passengers: 678 000 (2013)
- Quantitative improvements? No
- Qualitative benefits? No
- Sustainability: No
- Impact on GDP: No
- Better connections: No
- Assessment: New apron very underused; huge overlap and lossmaking airport; waste (car park removed in 2009)

Number of airports overlapping with the audited airport Cordoba, Spain (LEBA)



Administrative boundaries: © EuroGeographics © UN-FAO

Cartography: Eurostat — GISCO, 10/2013

Legend

- 2 hour travel time from audited airport
- Audited Airports
- Competitor Airports
- Non-competitor airports

Number of Overlapping Airports

- No Overlaps
- 1
- 2
- 3
- 4 >
- Country Border

Cordoba (LEBA) overlap with airport (ICAO code)	No of residents in the overlap area per airport	Residents in overlap (%)	Distance to competitor airport (km)	Time to competitor airport (minutes)
Granada (LEGR)	2 322 320	55.51	157	117
Jerez (LEJR)	1 762 730	42.13	195	143
Málaga (LEMG)	1 981 110	47.35	167	109
Seville (LEZL)	2 526 950	60.40	119	87
Ciudad Real Central (LERL)	300 514	7.18	180	146
Almería (LEAM)	20 044	0.48	303	224
Badajoz (LEBZ)	8 488	0.20	249	217

No of residents within 2 hours from audited airport	Total no of residents in overlap with access to multiple airports	Residents in overlap with access to multiple airports (%)	Distance to rail station (km)	Distance to rail line (km)	No of tourist nights per year within 2 hours from audited airport
4 183 640	4 130 200	98.72	1.40	1.31	14 544 934



Sources: Eurostat Population (2006) and Tourism data (2006/2010)

Airport Cordoba

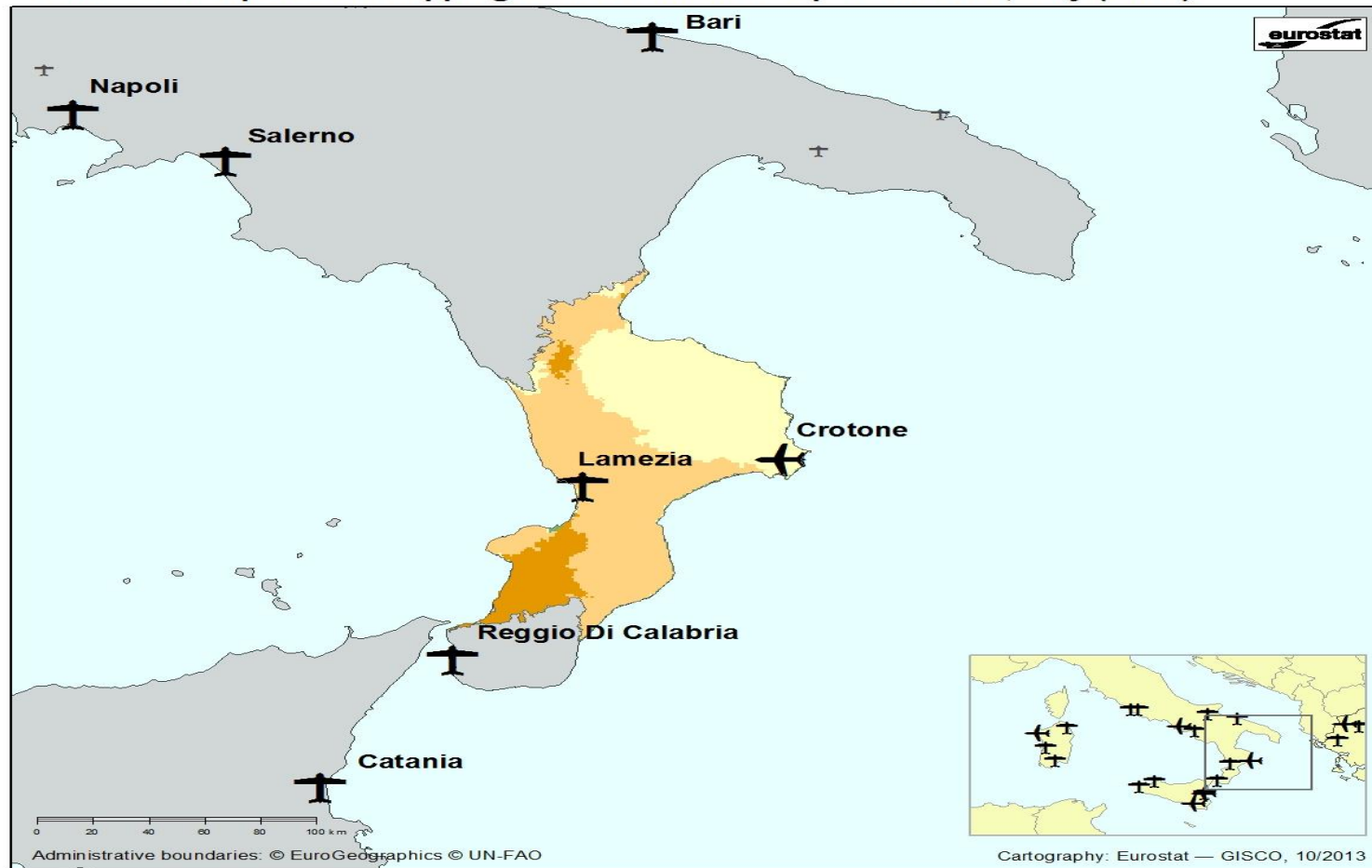
Investments in runway & apron

- EU-funding: 1,2 M€/2,1 M€
- Catchment area analysis ECA: **98,72 %** overlaps
- Passengers: 9 800 (2012)
- Quantitative improvements? No
- Qualitative benefits? No
- Sustainability: **No**
- Impact on GDP: No
- Better connections: No
- Assessment: **No sustainable investments; huge overlaps and waste for new apron (not used by commercial planes)**

Picture of apron, not used for commercial aviation



Number of airports overlapping with the audited airport Crotone, Italy (LIBC)



Crotone (LIBC) overlap with airport (ICAO code)	No of residents in the overlap area per airport	Residents in overlap (%)	Distance to competitor airport (km)	Time to competitor airport (minutes)	
Lamezia Terme (LICA)	1 511 610	98.61	88	62	
Reggio di Calabria (LICR)	1 061 540	69.25	211	128	
Bari (LIBD)	10 695	0.70	300	222	
Catania (LICC)	225 174	14.69	307	189	
Salerno (LIRI)	96 220	6.28	325	209	
No of residents within 2 hours from audited airport	Total no of residents in overlap with access to multiple airports	Residents in overlap with access to multiple airports (%)	Distance to rail station (km)	Distance to rail line (km)	No of tourist nights per year within 2 hours from audited airport
1 532 920	1 514 999	98.83	5.96	5.86	13 361 638

Sources: Eurostat Population (2006) and Tourism data (2006/2010)

Airport Crotone

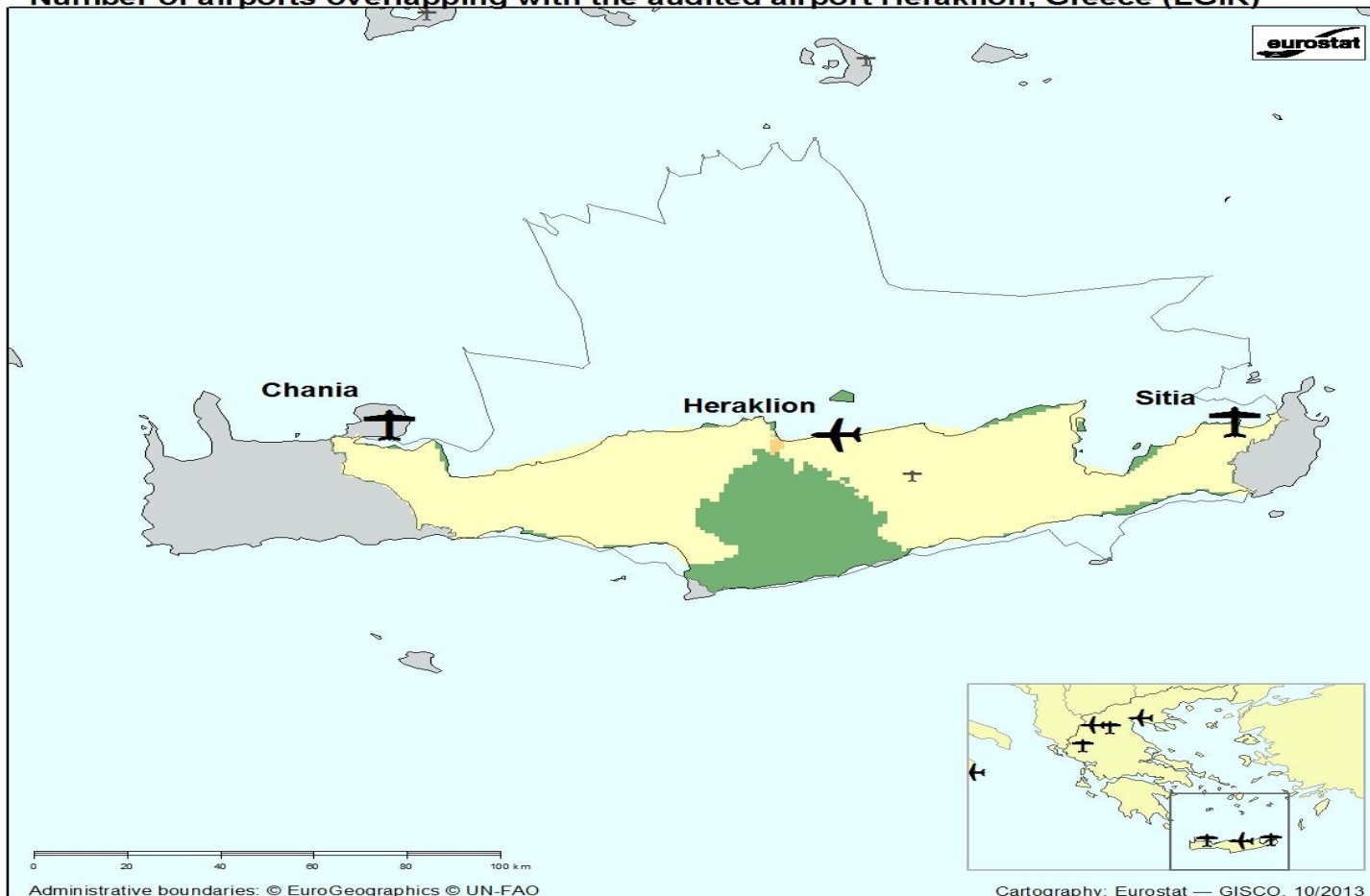
Investments in terminal, runway, apron, other

- EU-funding: 5,8 M€/11,3 M€
- Catchment area analysis ECA: **98,83 %** overlaps
- Passengers: 25 000 (2013)
- Quantitative improvements? No
- Qualitative benefits? No
- Sustainability: No
- Impact on GDP: No
- Better connections: No
- Assessment: **No sustainable investments, oversized terminal and control tower and huge overlaps**

Picture of empty terminal



Number of airports overlapping with the audited airport Heraklion, Greece (LGIR)



Administrative boundaries: © EuroGeographics © UN-FAO

Cartography: Eurostat — GISCO, 10/2013

Legend

- 2 hour travel time from audited airport
- Audited Airports
- Competitor Airports
- Non-competitor airports

Number of Overlapping Airports

- No Overlaps
- 1
- 2
- 3
- 4 >
- Country Border

Heraklion Kazantzakis (LGIR) overlap with airport (ICAO code)		No of residents in the overlap area per airport	Residents in overlap (%)	Distance to competitor airport (km)	Time to competitor airport (minutes)
Sitia (LGST)		294 139	56.87	102	107
Chania (LGSA)		168 734	32.62	144	131
No of residents within 2 hours from audited airport	Total no of residents in overlap with access to multiple airports	Residents in overlap with access to multiple airports (%)	Distance to rail station (km)	Distance to rail line (km)	No of tourist nights per year within 2 hours from audited airport
517 246	459 637	88.86	320.53	280.84	9 403 257

Sources: Eurostat Population (2006) and Tourism data (2006/2010)



Airport Heraklion

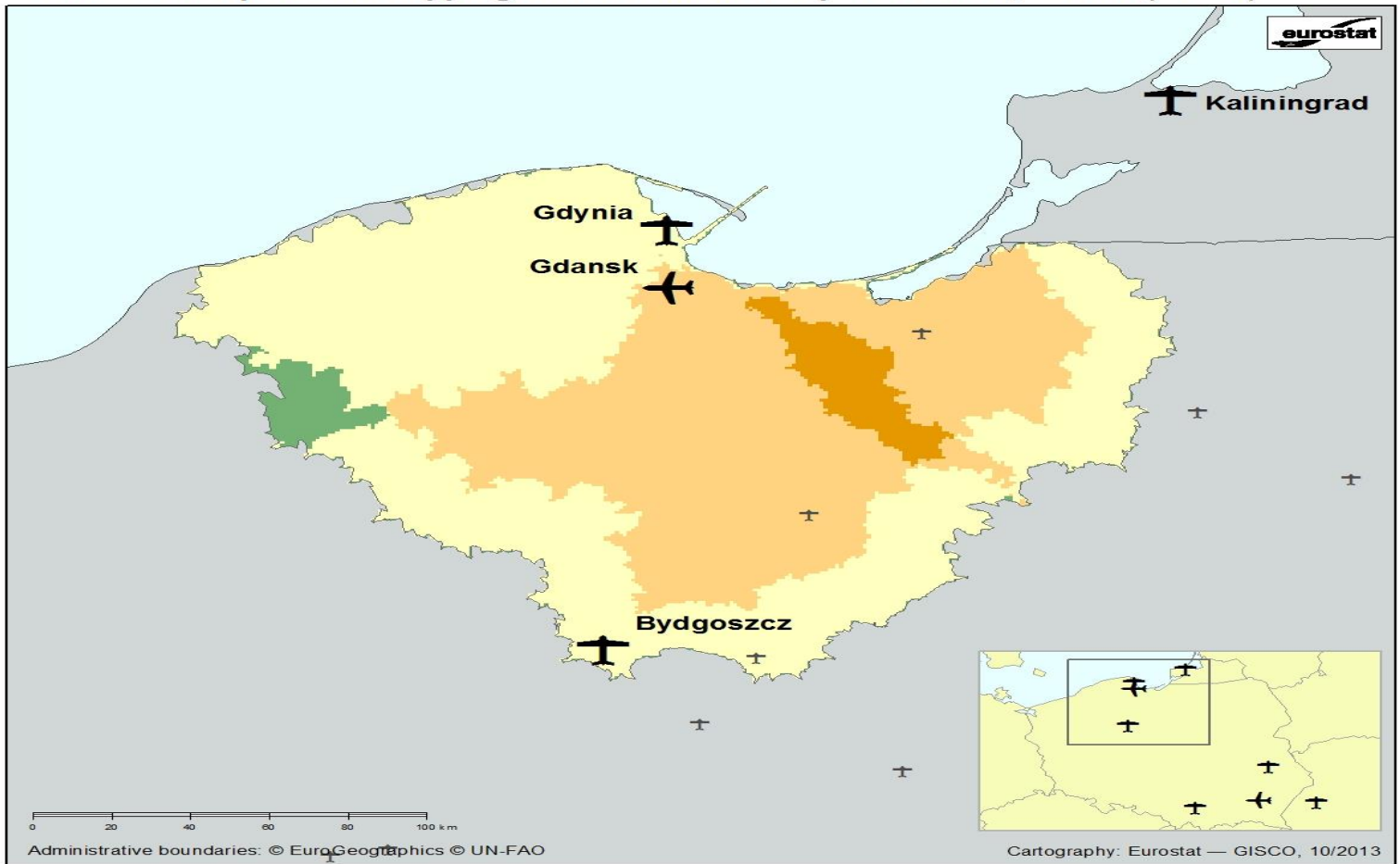
Investments in terminal

- EU-funding: 9,2 M€/11,5 M€
- Catchment area analysis ECA: **88,86** % overlap
- Passengers: 5 million (2012)
- Quantitative improvements? No
- Qualitative benefits? No
- Sustainability: Good
- Impact on GDP/connections: No
- Assessment: **busy seasonal airport with important overlaps**

Picture of check-in queue (outside the terminal)



Number of airports overlapping with the audited airport Gdańsk, Poland (EPGD)



Legend

- 2 hour travel time from audited airport
- Audited Airports
- Competitor Airports
- Non-competitor airports

Number of Overlapping Airports

- No Overlaps
- 1
- 2
- 3
- 4 >
- Country Border

Gdańsk (EPGD) overlap with airport (ICAO code)	No of residents in the overlap area per airport	Residents in overlap (%)	Distance to competitor airport (km)	Time to competitor airport (minutes)	
Bydgoszcz (EPBY)	2 361 950	63.15	166	111	
Khrabrovo/Kaliningrad (UMKK)	528 010	14.12	NA	NA	
Gdynia (EPOK)	2 620 577	70.12	32	37	
No of residents within 2 hours from audited airport	Total no of residents in overlap with access to multiple airports	Residents in overlap with access to multiple airports (%)	Distance to rail station (km)	Distance to rail line (km)	No of tourist nights per year within 2 hours from audited airport
3 740 490	3 738 940	99.39	1.90	0.83	7 816 900

Sources: Eurostat Population (2006) and Tourism data (2006/2010)



Airport Gdansk

Investments in terminal, apron, other

- EU-funding: 89,9 M€
- Catchment area analysis ECA: 99,39 % overlaps
- Passengers: 2,5 million (2012)
- Quantitative improvements? Yes
- Qualitative benefits? No
- Sustainability: Good
- Impact on GDP/connections: No
- Assessment: sustainable investments but huge overlap with neighbour airport Gdynia

Picture of terminal building



Summarised audit results (1/5)

1) Were the airport investments **needed and well planned?**

- **4 of the 5 MSs do not have a strategic airport development plan**; PL has such a plan but without quantified needs and objectives.
- Airport master plans usually do **not include a catchment area analysis**;
- There is **no co-ordination of investments (eg. with HST investments)**, or synergy with nearby airports (eg Catania-Comiso; Cordoba-Malaga-Sevilla, Vigo-Oporto, Santiago-A Coruna, etc.);
- Poor needs assessments with little use of CBAs and **no modular approach applied**,
- Objectives were usually very general and not measurable;
 - eg. «to ensure an acceptable level of security and safety», « to modernise infrastructures so as to improve the level of service to passengers », « to reduce the walking distance for departing passengers », ..

Summarised audit results (2/5)

2) Were the airport investments well managed?

- The main criteria to get selected is the **project ability to spend the money on time**; retrospective financing was noted in Greece (80%) and Italy (50%);
- The EC has provided a lot of guidance which in practice is not well applied;
- The EC management varied (good and less good examples noted);
- Supervision is good for some DG REGIO desks (EST/PL), superficial for others: eg. in ES and IT, the MA management prevents the EC to have a full picture (but DG REGIO does not really care...e.g. Canarias 600 projects);
- The EC has only been made aware of shortcomings for three out of the 20 airports (Thessaloniki, Comiso and Tallinn), and remedies varied.

Summarised audit results (3/5)

3) Were the airport investments **cost-effective** (1/3)?

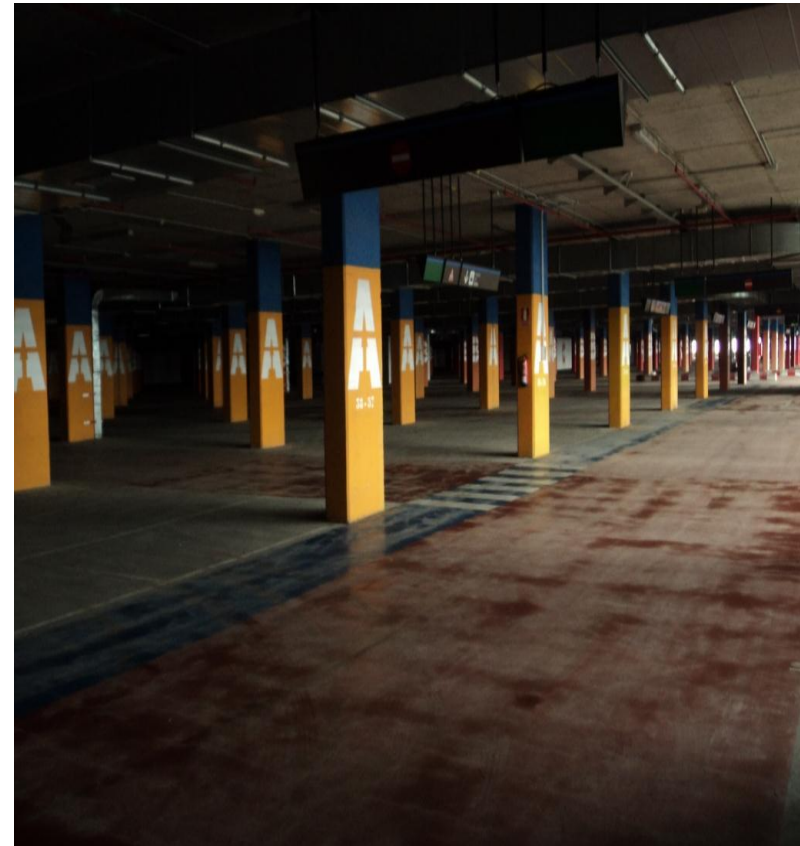
Physical outputs were usually ok: what was foreseen to be built, was built, irrespective of the need (3 exceptions: Thessaloniki, Crotone and Cordoba);

Delays are the norm (18/20 airports, average 23 months); up to 6 years in Murcia and 5 years in Thessaloniki and Napoli;

Cost overruns also (95,5 million € more than originally budgeted for the 9/20 airports audited)

Majority of what was built is being used (7 exceptions of waste because of oversized or not needed: Vigo, Cordoba, Fuerteventura, La Palma, Catania, Comiso, Thessaloniki)

Eg. one of the two closed car parks in La Palma airport:



Summarised audit results (4/5)

3) Were the airport investments **cost-effective (2/3)?**

Severe underuse of infrastructures built in 5/20 airports (Tartu, Kastoria, Burgos, Cordoba and Crotona with very few n° of planes) due to:

- overoptimistic forecasts,
- forecast methodology (peak hour definition in ES → always building for the peak),
- crisis effect ?

Little quantitative improvements:

only 11/20 airports increased slightly the N° of passengers from 2011 → 2012, overall decrease of some 5 million passengers for the 20 airports

Eg. empty airport of Crotona



Summarised audit results (5/5)

3) Were the airport investments **cost-effective (3/3)?**

- **Little qualitative benefits:**

- No measuring of IATA service levels;
- In 7/20 airports positive survey replies for improved customer service

- **Poor sustainability:**

- Cumulated losses of **1,157 billion** € (2000-2012) for all 20 airports
- 6/20 made profits (Catania, Napoli, Thessaloniki, Heraklion, Tallinn, Gdansk);
- 10/20 do not have prospects of a future break even

- **No impact on GDP evidenced**, and

- **No focus on local connections or reinforcement of public transport** (e.g. in Thessaloniki or Catania building car parks and even reducing frequency of public buses)

Summary of audit findings

Out of the total population of 666 M€, 460 M€ of investments were audited for the 20 airports. Key findings:

- **50 M€ spent on things which are NOT infrastructure** (eg repairs & maintenance (ES), temporary buildings (ES, IT), ambulances, firebrigade cars (PL, IT), a plane (GR))

- **Too much infrastructure was built too close to each other**, resulting into:

a) **129 M€ not needed** investments (Madrid-Barajas people mover, Badajoz terminal, Cordoba apron, Thessaloniki runway on the sea)

b) **38 M€ not used** infrastructure (Vigo car park, Catania old terminal-hangar, Thessaloniki cargo, La Palma car park, Fuerteventura cargo)

c) **60 M€ oversized** infrastructure (Fuerteventura terminal, tower and apron, La Palma terminal and apron, Crotone tower, ...)

d) **33 M€ scarcely used** infrastructures: airports <25 000 passengers/year (<60 pax/day): (Kastoria, Tartu, Vigo, Burgos, Cordoba, Crotone)

→ ...and all this spending was considered **LEGAL** and **REGULAR**...

(FINAL) PART SIX:

Reporting, Recommendations and their impact



EUROPEAN
COURT
OF AUDITORS

Agenda

- 1) Principles of impact of performance audits
- 2) Disseminating a performance audit report
- 3) Follow-up of recommendations
- 4) Examples of impact of performance audits



Principles of impact of performance audits (1/2)

- 1977 INTOSAI Lima Declaration – ISSAI 1 section 1:

*“Audit is not an end itself but an indispensable part of a regulatory system whose **aim is to reveal deviations** from accepted standards and violations of the principles of legality, efficiency, effectiveness and economy of the financial management **early enough to make it possible to take corrective action** in individual cases, to make those accountable accept responsibility, to obtain compensation, or to take steps to prevent – or at least render more difficult – such breaches”.*

- European Parliament (2014 report on the role of Court of Auditors):

“the added value of the Court is directly linked to the use made of its work by Parliament and other stakeholders in the accountability process”

Principles of impact of performance audits (2/2)

- 1977 INTOSAI Lima Declaration – ISSAI 1 section 11:

*"1. The **audited organisations** shall comment on the findings of the Supreme Audit Institution within a period of time established generally by law, or specifically by the Supreme Audit Institution, and shall **indicate the measures taken as a result of the audit findings**.*

*2. To the extent the findings of the Supreme Audit Institution's findings are **not delivered as legally valid and enforceable judgments**, the Supreme Audit Institution shall be empowered to approach the authority which is responsible for taking the **necessary measures and require the accountable party to accept responsibility**."*

Audit Report Quality

- Objective – written from an independent unbiased viewpoint
- Complete – includes all information and arguments needed
- Clear – Clarity of message and easy to understand
- Convincing – Should convince the reader about the validity of the findings
- Relevant – Report content must pertain to the stated audit questions
- Accurate – Evidence should be true and all findings correctly portrayed
- Constructive – Should assist management in overcoming problems in the future
- Concise – Not longer than is necessary to convey and support the message

Audit Report Structure

- EXECUTIVE SUMMARY
- INTRODUCTION
- AUDIT SCOPE, APPROACH AND METHODOLOGY
- OBSERVATIONS
- CONCLUSIONS AND RECOMMENDATIONS

Disseminating a performance audit report

- 1) **Key issues are the recommendations:** *what do we consider that should be changed, to improve what was observed → clear, timebound, realistic.*
- 2) Publishing reports on Court's **website** with a key information note to the **press**
- 3) Citizens know about reports **through the media**
- 4) Presenting the report in a **press conference/briefing**
- 5) Presenting the report to the **budgetary authorities** (European Parliament, Council)
- 6) Presenting the report at **EU/national / sectoral conferences**

Follow-up of recommendations (1/3)

Main purposes:

- 1) Increase the probability that recommendations will be implemented
- 2) Assist the legislative and budgetary authorities and guide their actions
- 3) Evaluate the Court's performance
- 4) Create incentives for learning and development of best practices

Follow-up of recommendations (2/3)

When?

- Follow-up normally takes place **2-3 years after** the publication of the performance audit report

How?

- Start from the **reports of the auditees to budgetary authorities** (e.g. Commission internal audit service report to Parliament and Council)
- It's not about re-doing the audit, but about checking if the auditees have implemented **sufficient and appropriate measures to resolve weaknesses identified**

Follow-up of recommendations (3/3)

Follow-up is a learning tool for auditors to identify:

- What worked well and **why (e.g. where the recommendations enough specific, timely, achievable?)**
- What did not work and **why**
- **Lessons for the future** and possible wider applications for all performance audits

Examples of impact: 1. Seaports performance audit

- ECA recommended to make 2014-2020 EU funding to seaports infrastructures *"conditional upon the existence of a comprehensive long-term port development strategy (based on an assessment of needs) for all the ports of the region"*.
 - **This became ex-ante conditionalities (7.1 and 7.3) for 2014-2020 ERDF and Cohesion fund spending**
- ECA recommended to *"strengthen the assessment procedure for major projects and Cohesion Fund projects"*
 - **Decision to transfer 11.3 billion euro of the Cohesion Fund allocation to the Connecting Europe Facility under Commission's direct management via its executive agency INEA**

Examples of impact: 2. Airports performance audit

- ECA recommended that in 2014-2020 *“Member States only allocate EU funding to airport infrastructures in those airports which are financially viable and for which investment needs have been properly assessed and demonstrated” ... and*
“Member States should have coherent regional, national and supranational plans for airport development to avoid over-capacity, duplication and uncoordinated investments in airport infrastructures”
- **the European Parliament required the Commission to “report back to Parliament's Committee on Budgetary Control within a year from the adoption of this resolution with progress against the ECA recommendations”**
- **funding for small regional airports stopped**

Examples of impact: 3. Marco Polo multi-modality performance audit

- ECA recommended to “consider discontinuing EU funding for transport freight services following the same design as the Marco Polo programmes”
→ As a consequence, such programmes have not been renewed

Examples of impact: 4. Maritime transport performance audit

- Review of EU planning for ports, of working methods for granting EIB loans, and of state aid guidance plans
- Clarification of ambiguous policy on superstructure fundings: potential distortion between market players solved
- Increased efforts to simplify maritime transport formalities (« one-stop-shops», « EU-single window »)

→ As a consequence, EU-funding now targeted to key infrastructures to connect ports to their hinterlands (eg rail and inland waterway connections)

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