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# eoVox initial analysis and findings

*based on consultation with 63 VACs*

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Frascati 14 September 2006

# Outline

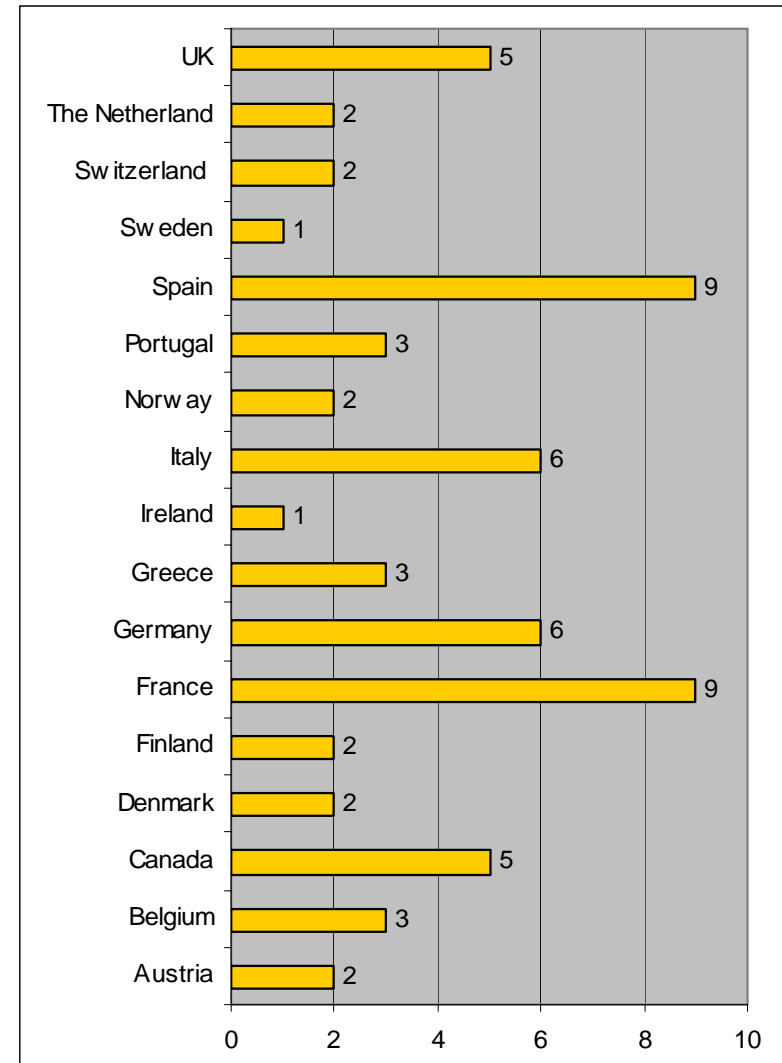
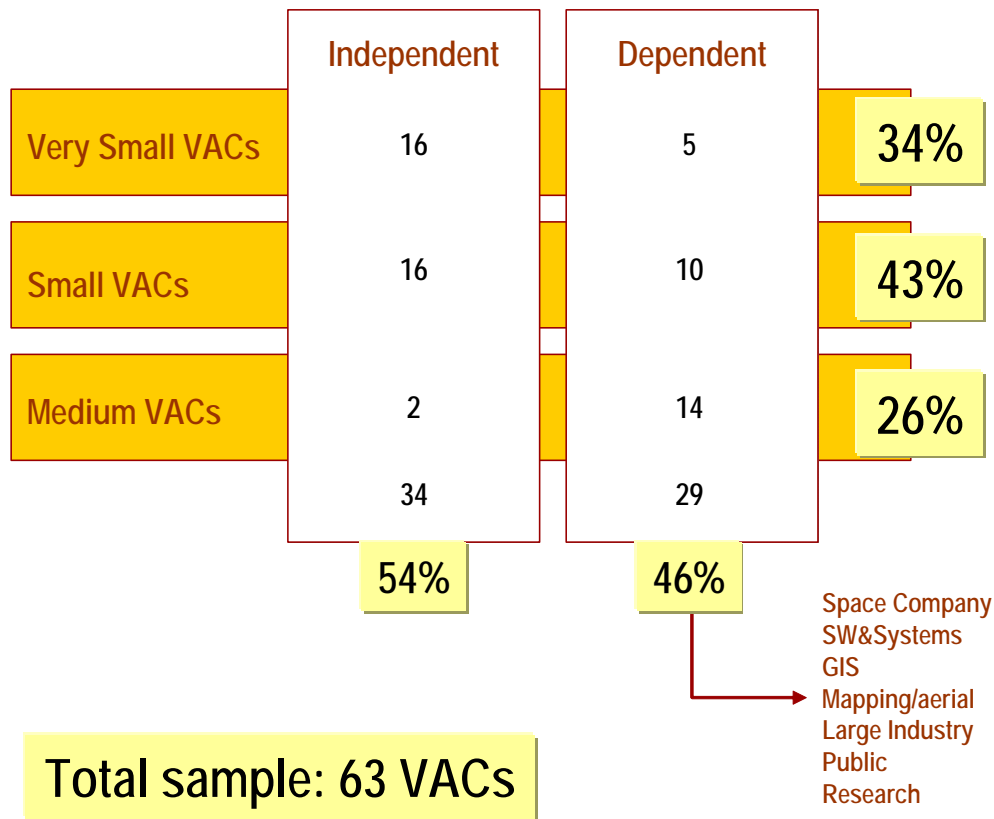
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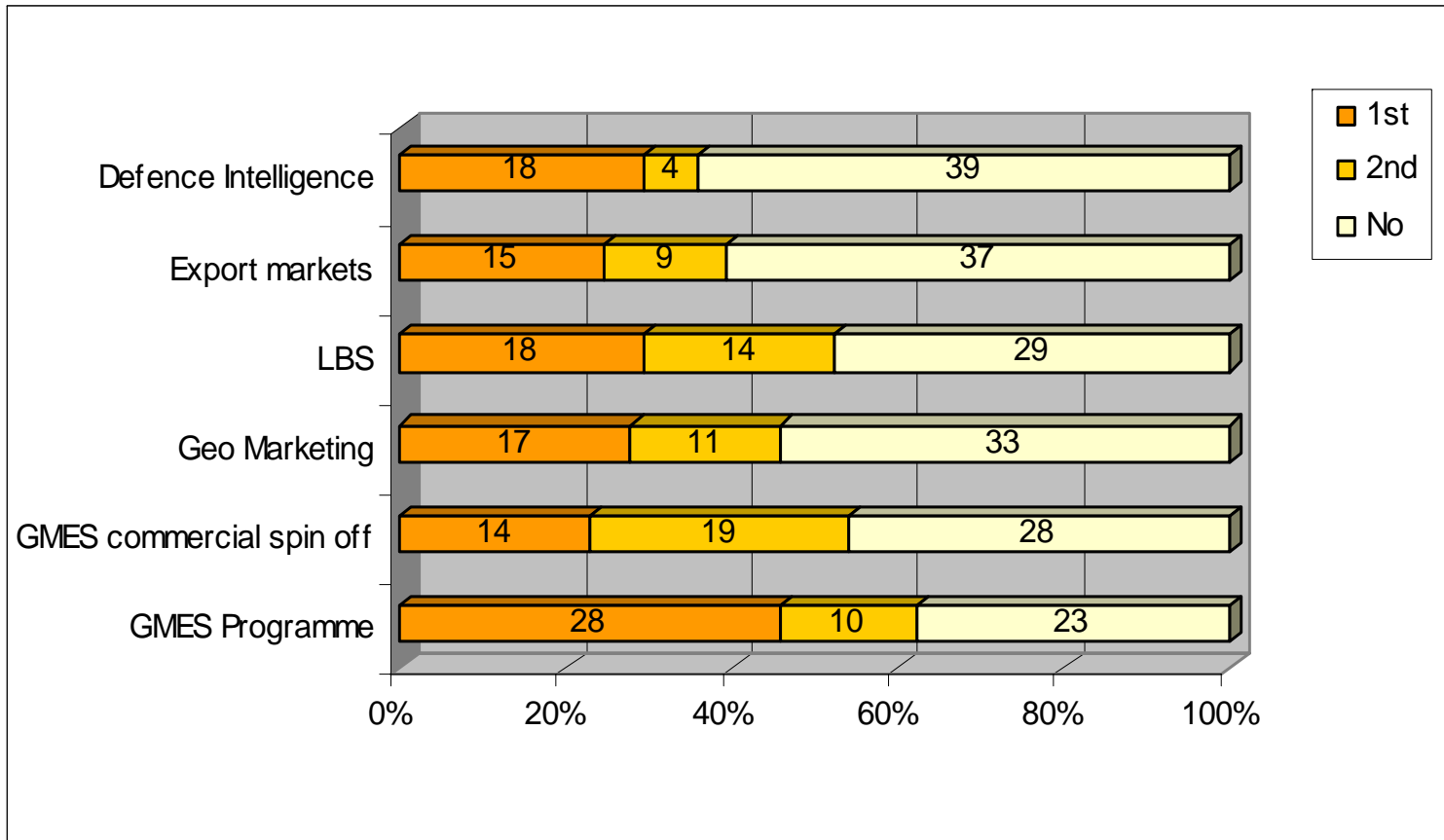
- The sample of VACs
- Drivers to affect supply and demand in the EO service sector
- Industry development
- Expectations of a Trade Association
- Feedback on development financing to support VACs



# Type of VACs included in the EOVOX survey



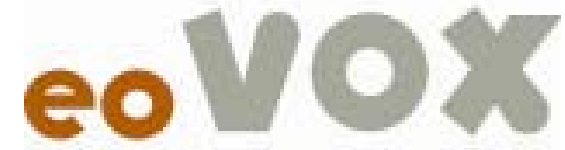
# Market drivers



**Two distinct groupings:**  
Those who are part of GMES  
Those who are not part of GMES



# Specific comments on GMES



<b>GMES will be an important driver but mainly for the big players. Does not help small players.</b>	<i>Small VAC. Not active in GMES</i>
<b>Politically speaking Yes. Practically speaking not sure if GMES will increase the overall market</b>	<i>Medium VAC. Active in GMES</i>
<b>It is positive that Governmental users are being organised to reach a critical mass of demand Geo return is killing an open tender process e.g. if one country is not participating in GMES then a service provider from that country cannot participate either Risk that GMES services will disturb already established commercial markets and we cannot isolate public from private services We need to have a clear profile of GMES to avoid wrong perceptions</b>	<i>Medium VAC. Active in GMES</i>
<b>Applications to support European Policies is the right approach as long as the CBA significance is there</b>	<i>Medium VAC. Active in GMES</i>



## Specific comments on GMES



<b>The roles are already given - the big companies are running the show</b>	<i>Medium VAC. Active in GMES</i>
<b>No GMES is only for the big players, nothing related to us...</b>	<i>Small VAC. Not active in GMES</i>
<b>...difficult for small companies to get involved</b>	<i>Small VAC. Not active in GMES</i>
<b>No GMES Programme just another excuse to build expensive satellites</b>	<i>Medium VAC. Not active in GMES</i>
<b>GMES provides a useful framework to develop these applications. Not sure to what degree it will actual develop the market as it is doubtful how this will be picked up in terms of finding new funding sources in the future. It is a good way to demonstrate new data source to users.</b>	<i>Small VAC. Active in GMES</i>



# Other market drivers identified



<b>Commercial drivers</b>	<i>Very high resolution data (50 cm or more)</i> <i>Commercial markets</i> <i>Media</i> <i>Urban environmental monitoring, Urban sustainability</i> <i>Niche applications</i> <i>Off shore</i> <i>Agribusiness for sustainable development. Control worldwide food resources for the new decades</i> <i>Natural resources exploitation, e.g. oil and gas</i>
<b>Technological drivers</b> <b>Synergy</b>	<i>Synergy with other technologies such as SatCom for fast data delivery</i> <i>As input to Data assimilation forecast and modelling</i>



# Other market drivers identified

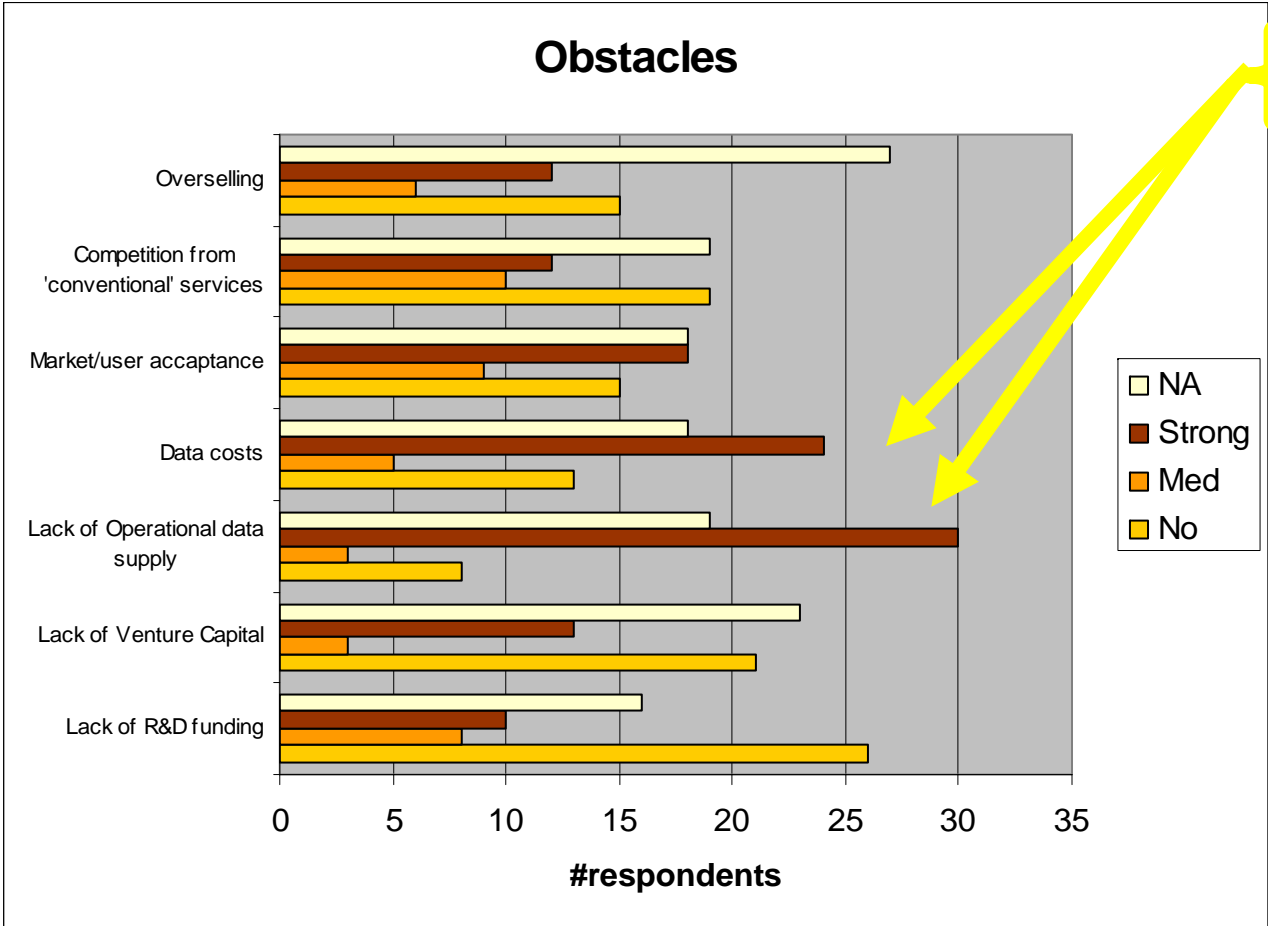
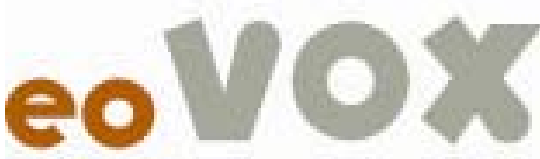


<b>Institutional drivers</b>	<i>National GMES service centres-&gt; operational services continuation of services continuation of satellites</i> <i>European legislation e.g. Water directives</i> <i>Geo standards, INSPIRE could be Important</i> <i>Pollution control</i> <i>Border control</i> <i>Humanitarian applications</i> <i>International Regulation/legislation: e.g. Kyoto protocol</i>
<b>Environmental drivers</b>	<i>Climate change and thereby extreme weather events were mentioned a couple of times as important as it provides new opportunities for EO services, monitoring and forecasting and also to Trigger demand for dedicated satellites (global public good)</i> <i>Environmental market in general</i> <i>Marine ecosystems modelling</i> <i>Crisis management</i> <i>Risk management</i>





# Obstacles for market development



- 1. Operational data supply
- 2. Data costs



Raises fundamental issues:  
 Data policy  
 Ground system  
 Data availability



# VACs collaboration and industry structure



	Yes	No	na	Total
<b>VACs to form closer collaboration</b>	48	6	6	60
	80%	10%	10%	

Yes – we are already doing that  
We are forced to do this through projects  
Networking  
Yes with complementary players

	Yes	No	na	Total
<b>Similar Industry structure in 10 years</b>	15	36	9	60
	25%	60%	15%	

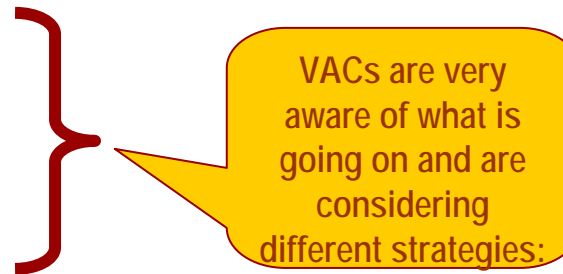


# Future structure of the industry



- Keyword: Consolidation of Industry
- Overall market to grow – the pie will become bigger
- The biggest will become bigger by:
  - acquisition and expansion
  - Providing end-to-end systems, GIS ready products
  - The large players will in particular benefit from GMES

- Small VACs will:
  - Be absorbed
  - Disappear
  - Grow bigger by networking
  - Sustain as niche players

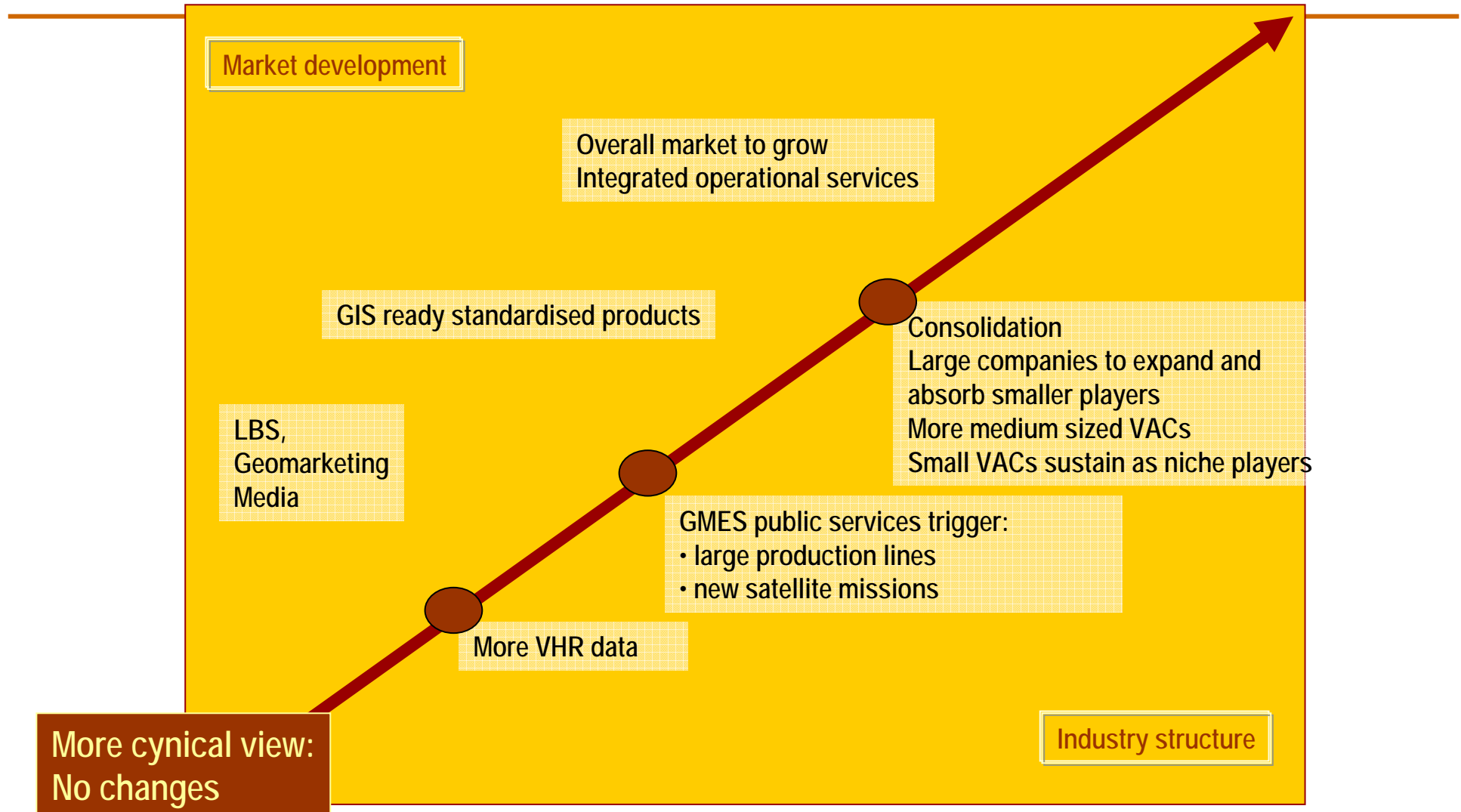


1. Stay at good terms with the big players
2. Networking with complementary players

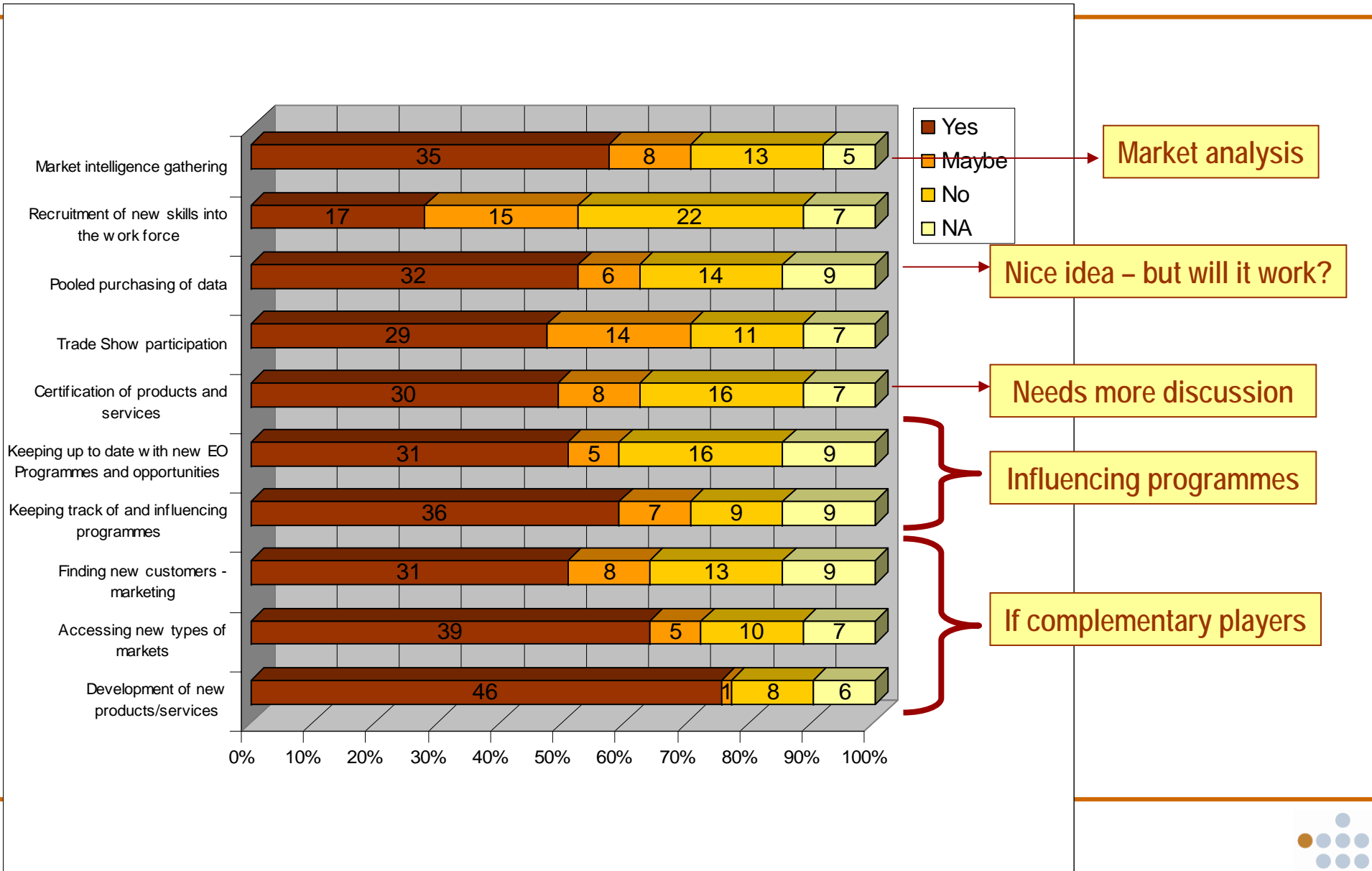
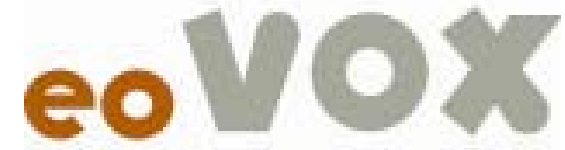
- New players will emerge
  - Spin of from universities (low entrance barriers)



# Prevailing scenario for the future



# Generic tasks where companies could work together



# Level of involvement in Trade Associations



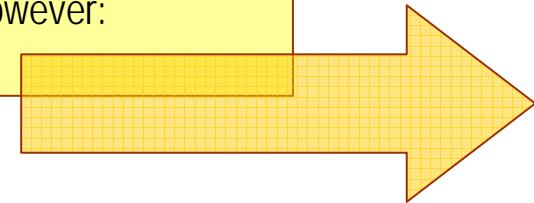
	# resp.	% of total
Member of National Trade Association	32	52%
Member of International Trade Association	39	64%
EARSC member	35	57%

## Experienced benefits:

Not overwhelming positive replies,  
main benefits mentioned:

Networking  
Workshops

Specific EARSC:  
Developing in the right  
direction, however:



# What an EOTA should and should not be



## Should not be:

A Talking club

A Club of friends giving contracts to each other

Not progressive – forward looking

Not only serving the interests of specific players (large companies)

It should not be dominated by people who just want to build hardware

## “Wish” list

1. Professional lobbying to influence future EO Programmes to serve the interests of its members in a neutral and fair manner
2. To facilitate Networking
3. Market intelligence/market studies
4. Export facilitation/support
5. Communication on what is going on.

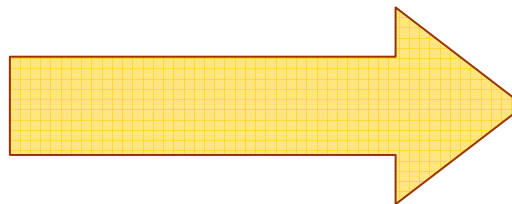


# Feedback on future funding requirements

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- All companies have taken part in National, EC or ESA R&D programmes
- EC projects are not popular
  - IPs are too big and inefficient
  - Except for the funding no additional value of participating
- ESA GSE and EOMD are very popular
- Quotations:





# Quotations GSE/EOMD



EC bad for small companies  
ESA to stay present in GSE (open letter from EARSC in Oct 05)  
EOMD is good. End user involvement  
Small contract favour small VACs

ESA very good compared to EC and national programmes  
More EOMD type projects with focus on end-user demonstrations  
Size of contract and duration perfect  
Like the flexibility of ESA  
Only negative thing is the requirement that a given idea/project had not been done before

ITTs too restrictive since requirements that it has to be new and not funded before  
VAC specific (smaller projects)  
Allow for certain degree of freedom (not micro-management)  
Encourage to work together if similar proposals are put forward - both could be funded/merged  
Why not have a pre-check service to encourage collaboration?

Too many documents/deliverables  
SoW too much of an engineering approach  
The feeling for the real issues is missing

ESA should play a bigger role in VA segment , not only concerned with building satellites  
More EOMD  
Generally speaking I am very content with ESA - only problem is Geo return  
ESA to move towards operational data services - it is crazy to launch expensive satellites and then fail on the data delivery  
ESA can facilitate the funding and development of satellites through concessions since the market can make the satellites cheaper (half price) than if contract is to go through the ESA machinery - but allow for real competition  
Sentinel projects are good - however they should not compete with US, better to complement and fill gaps



# Future Funding needs

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- VACs want much more EOMD funding!
  - Innovative projects
  - To test new ideas
  - Demonstration to a user
  - Export
  - Development of commercial markets
- SoW should not be too prescriptive
  - leave freedom and flexibility
- Size and duration of contracts are perfect

