

Wir machen Schifffahrt möglich.
CCNR colloquium

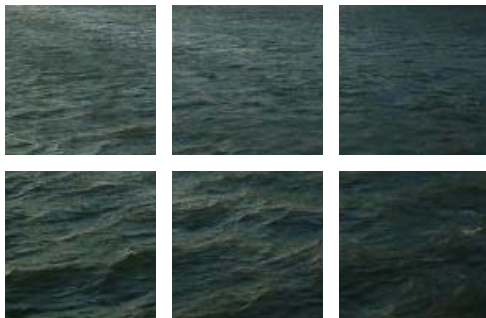
“The evolution of radar in inland navigation“



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Wasser- und
Schifffahrtsverwaltung
des Bundes

Experiences with the installation and testing of radar equipment conducted by Approved Specialised Firms



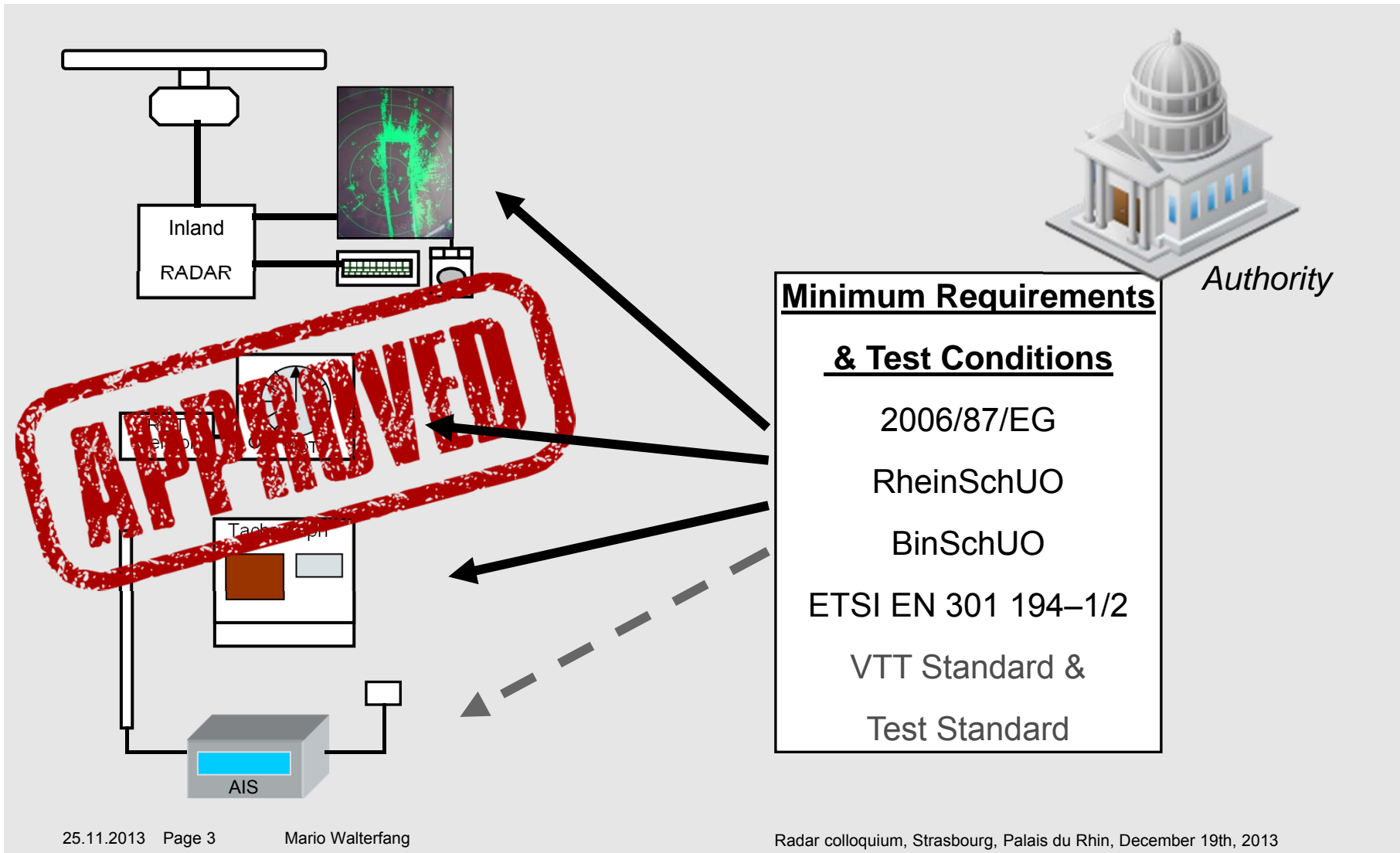
Mario Walterfang
Fachstelle der WSV für Verkehrstechniken (FVT)
German Federal Waterways and Shipping Administration

Strasbourg, Palais du Rhin, December 19th, 2013

Overview

- Need for Approved Specialised Firms (ASF) – why do we need ASFs at all?
- The concept of Approved Specialised Firms
- Requirements for becoming an Approved Specialised Firm
- Experiences with Approved Specialised Firms
- Certification of companies from CCNR non-member states
- Conclusions

Type Approval of radar, rate-of-turn indicator, inland AIS and tachograph

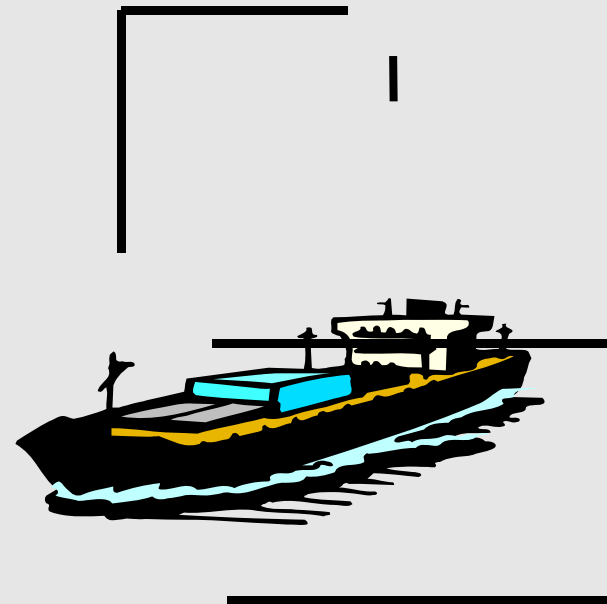
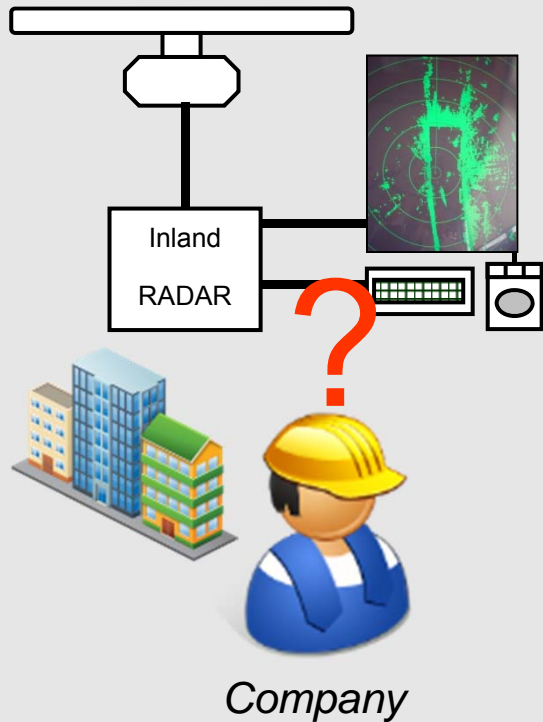


Need for Approved Specialised Firms (ASF)– why do we need ASF at all?



- To ensure the safety and efficiency on waterways, **well-functioning equipment** onboard a vessel is necessary
- To reach that goal, both, **type approval** and the **installation of equipment** have to be considered!

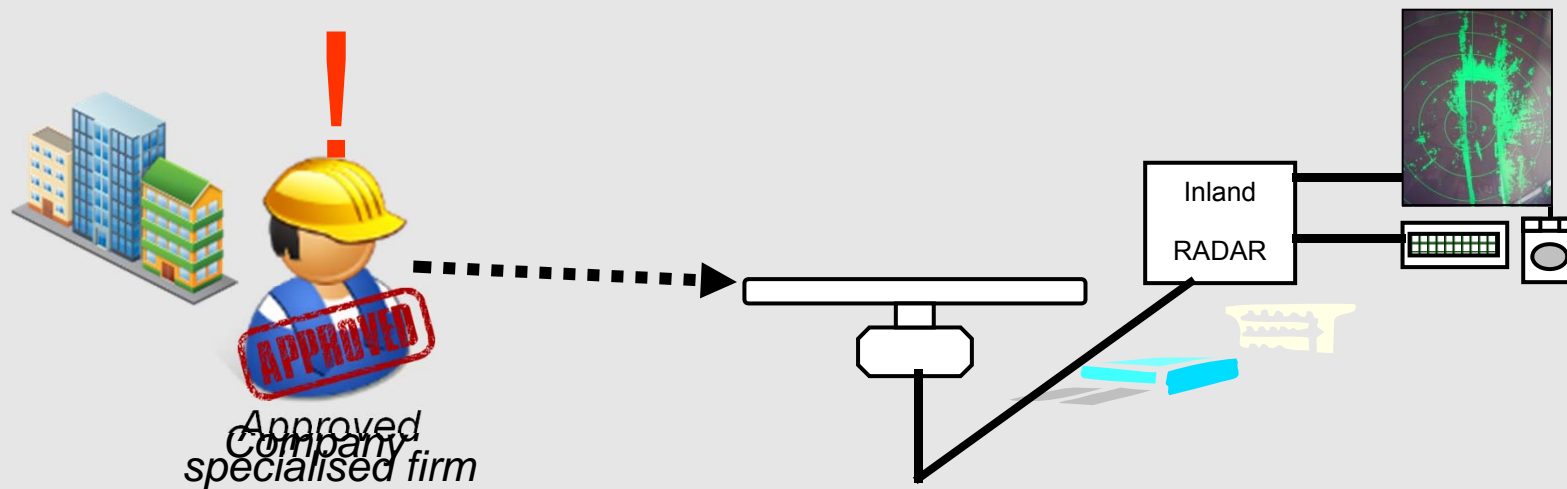
Need for Approved Specialised Firms (ASF)– why do we need ASF at all?



How can be ensured, that the installation of equipment is done in sufficient quality ???

The concept of „Approved Specialised Firms“

- No additional Authority
- Concept of „Approved specialised firms“



The concept of „Approved Specialised Firms“

BinSchUO

Directive 2006/87/ec

RheinSchUO / ROSR / RVBR

Anhang M, Teil III:

§1 Ziel dieser Vorschriften
Mit diesen Vorschriften soll sichergestellt werden, dass im Interesse der **Sicherheit** und **Leichtigkeit** der Binnenschifffahrt Navigationsradar- und Wendeanzeigeranlagen nach **optimalen technischen und ergonomischen Gesichtspunkten eingebaut** werden und anschließend eine Funktionsprüfung erfolgt.(...)

§2 Zulassung der Geräte
Für die Radarfahrt in der Rheinschifffahrt dürfen nur Geräte eingebaut werden, die **eine Zulassung** nach den geltenden Vorschriften der Zentralkommission für die Rheinschifffahrt besitzen und die eine Zulassungsnummer tragen oder aufgrund gleichwertiger Typgenehmigungen zugelassene Geräte.

§3 Anerkannte Fachfirmen

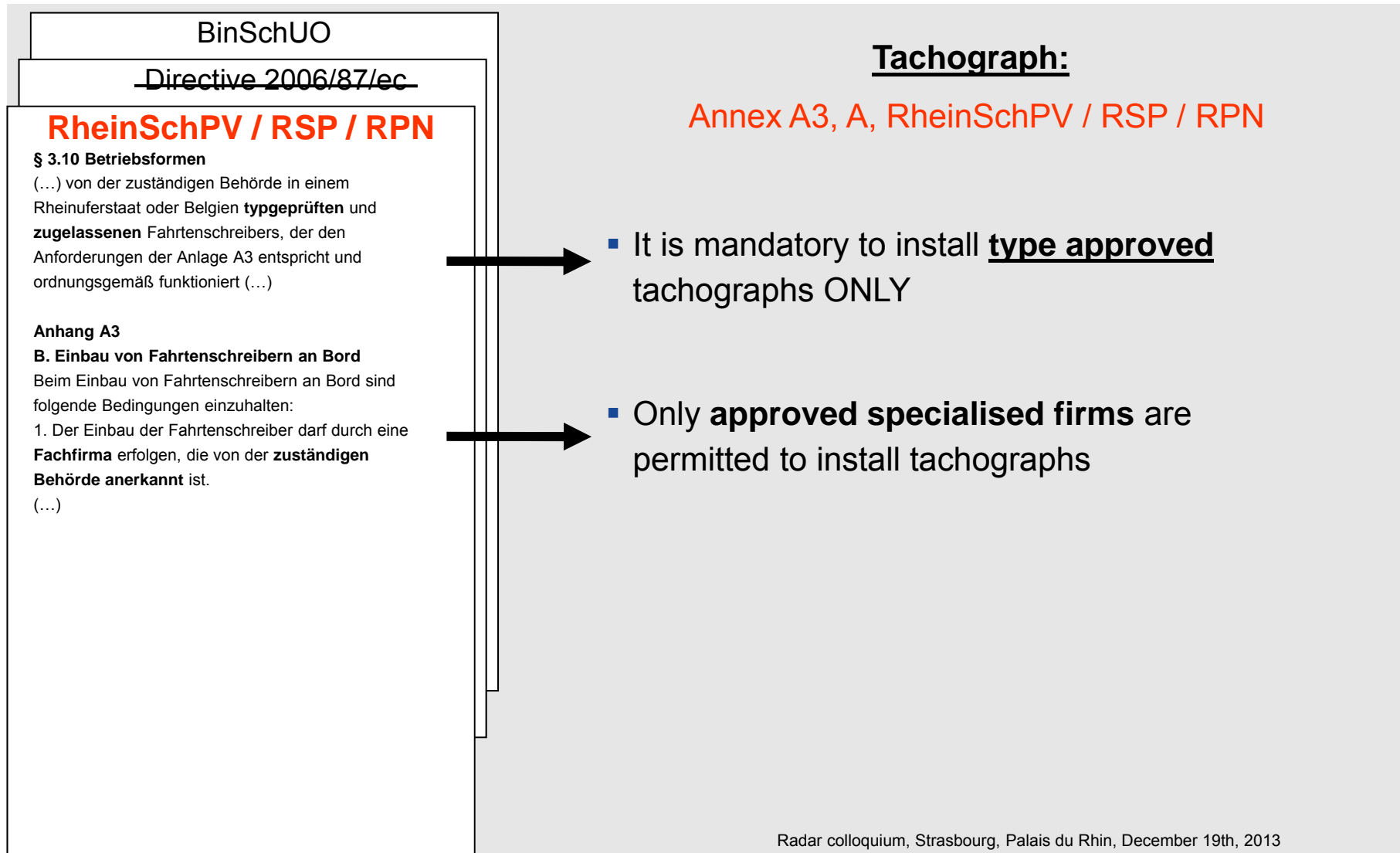
1. Der Einbau oder Austausch sowie die Reparatur oder Wartung von Radaranlagen und Wendeanzeigern dürfen nur von **geeigneten Fachfirmen**, die von der zuständigen Behörde auf der Grundlage von § 1 anerkannt sind, erfolgen. Die zuständigen Behörden sind der Zentralkommission für die Rheinschifffahrt (ZKR) bekannt zu geben.
2. Die Anerkennung kann von der zuständigen Behörde **widerrufen** werden, wenn die Fachfirma den Anforderungen nach § 1 nicht mehr gerecht wird.
3. Die zuständige Behörde teilt die Namen, Adressen, Telefonnummern und Emailadressen der von ihr anerkannten Fachfirmen der **Zentralkommission** für die Rheinschifffahrt umgehend mit.

Radar and ROT-Indicator:

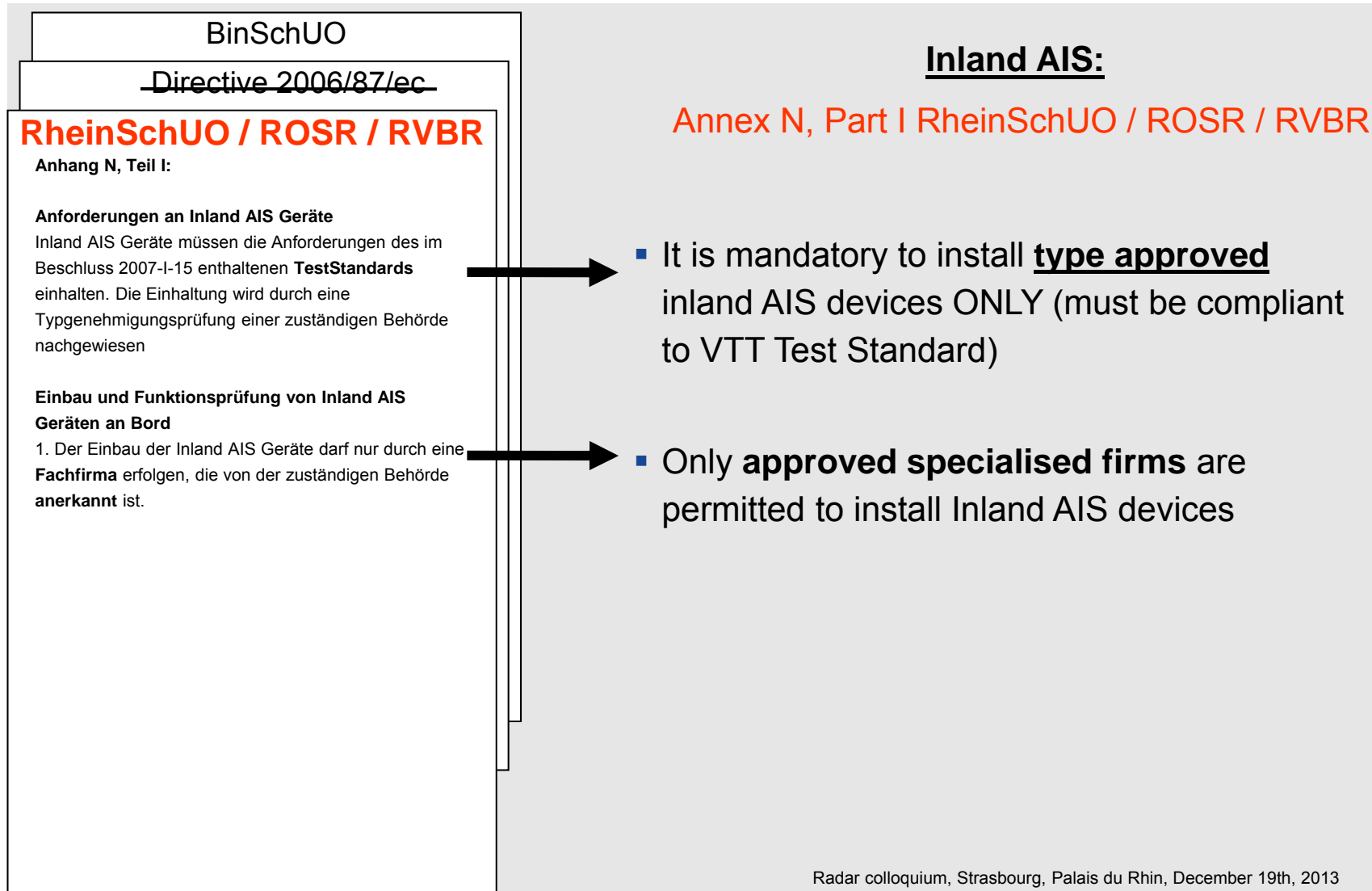
Annex M, Part III RheinSchUO / ROSR / RVBR

- §1: The main reason to introduce the concept of „approved specialised firms“ is to increase the **safety** and **efficiency** in inland shipping by ensuring that the installation is done under **optimum technical and ergonomic aspects!** After installation, a functional test has to be performed!
- §2: It is mandatory to install **type approved** radar equipment **ONLY!**
- §3: Only **approved specialised firms** are permitted to install, repair or maintain Radar and ROT equipment

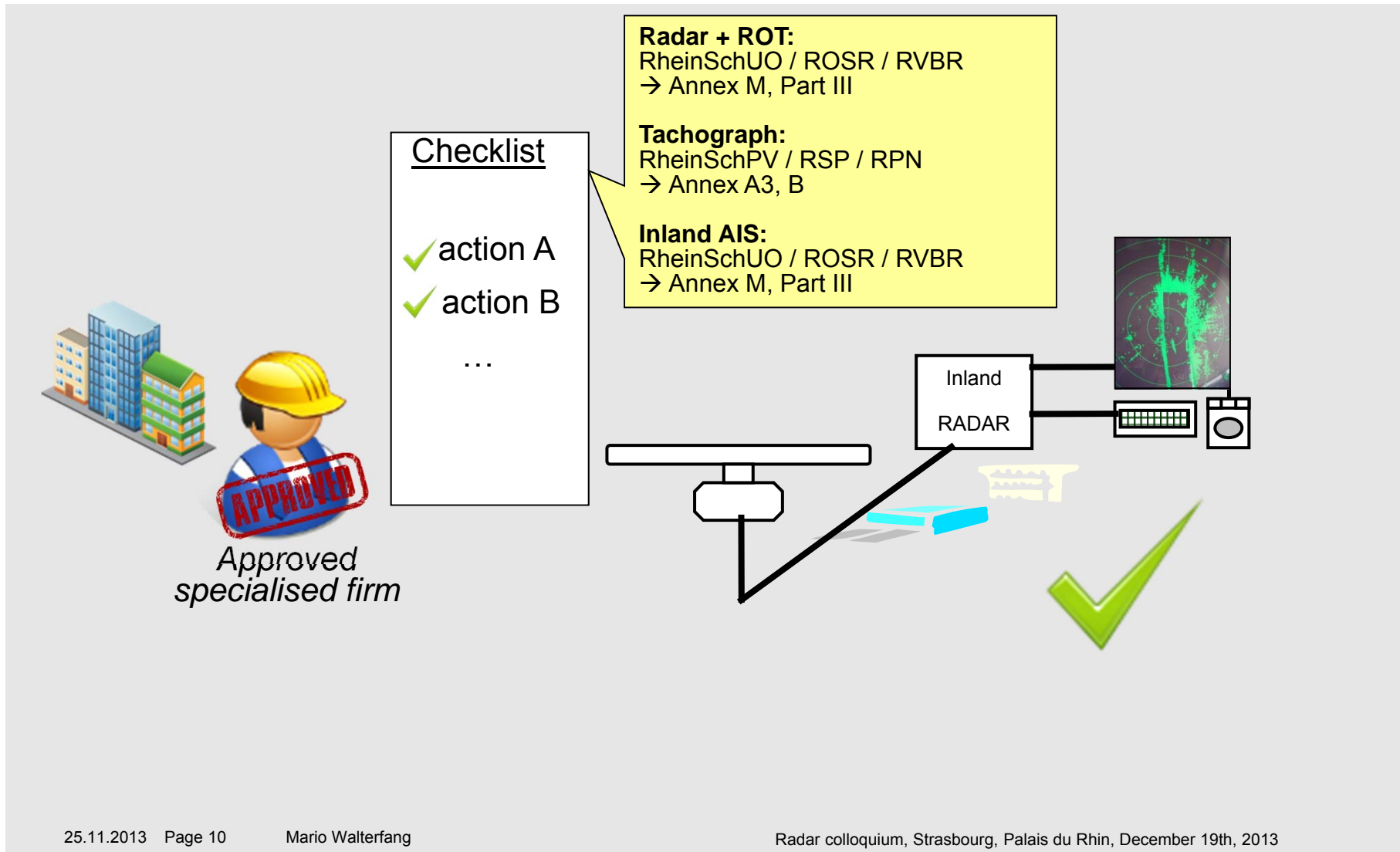
The concept of „Approved Specialised Firms“



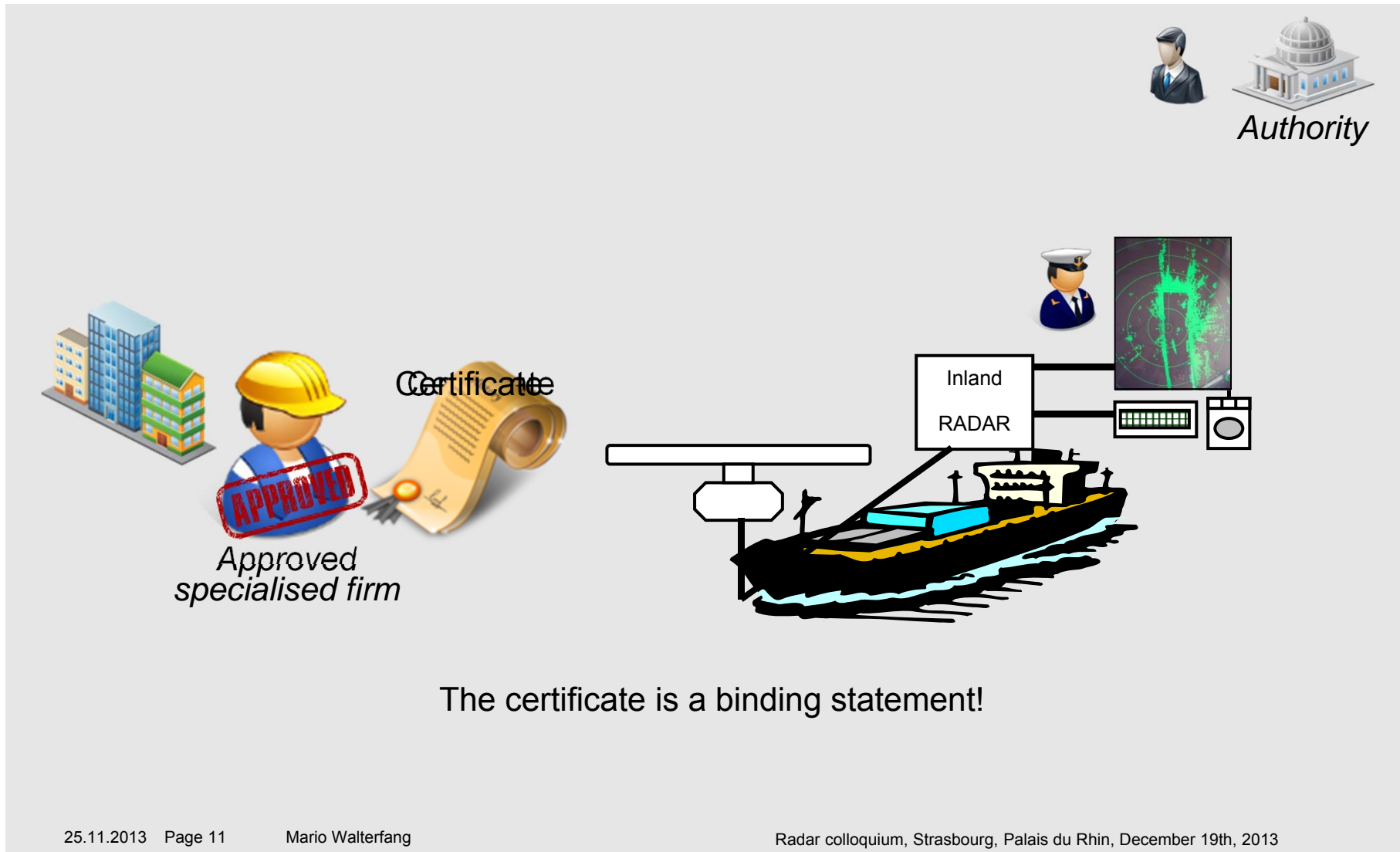
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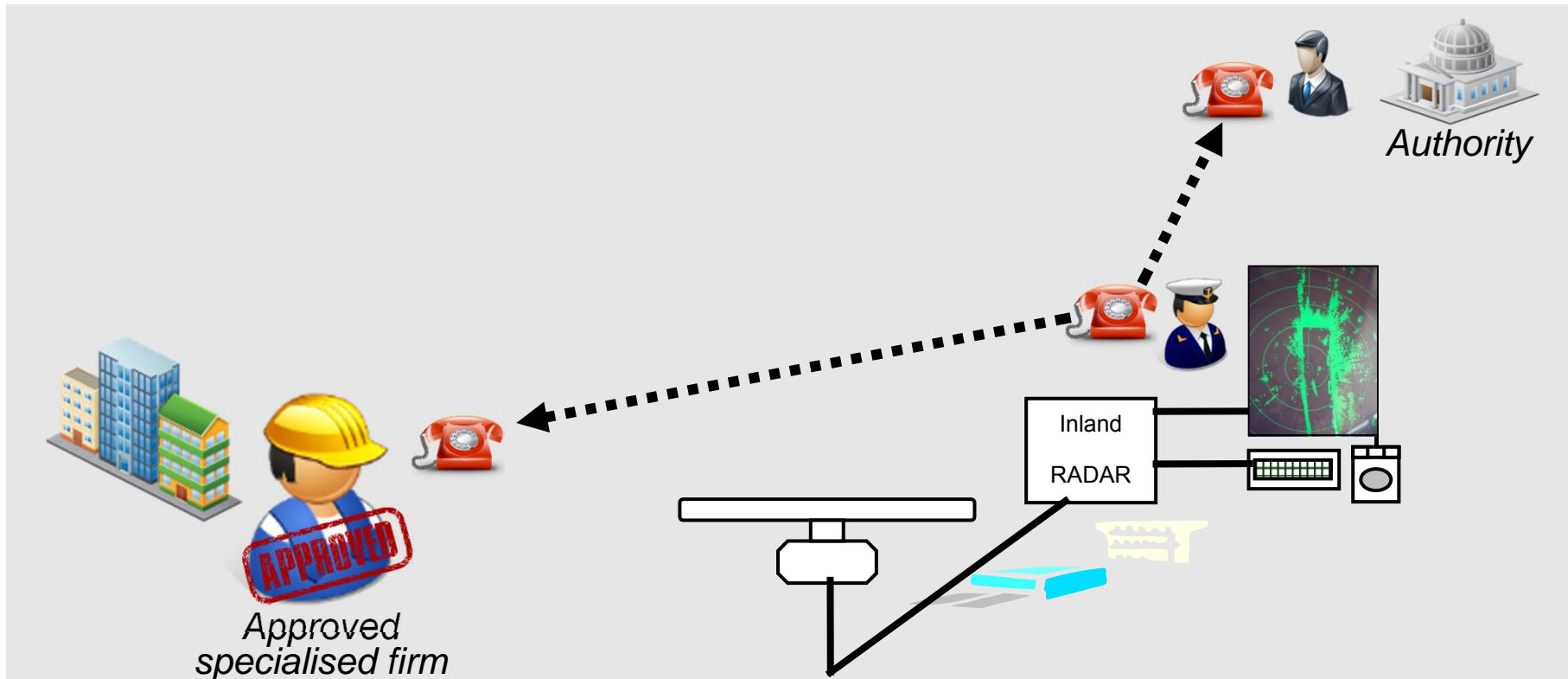
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The Concept of „Approved Specialised Firms“



The concept of „Approved Specialised Firms“

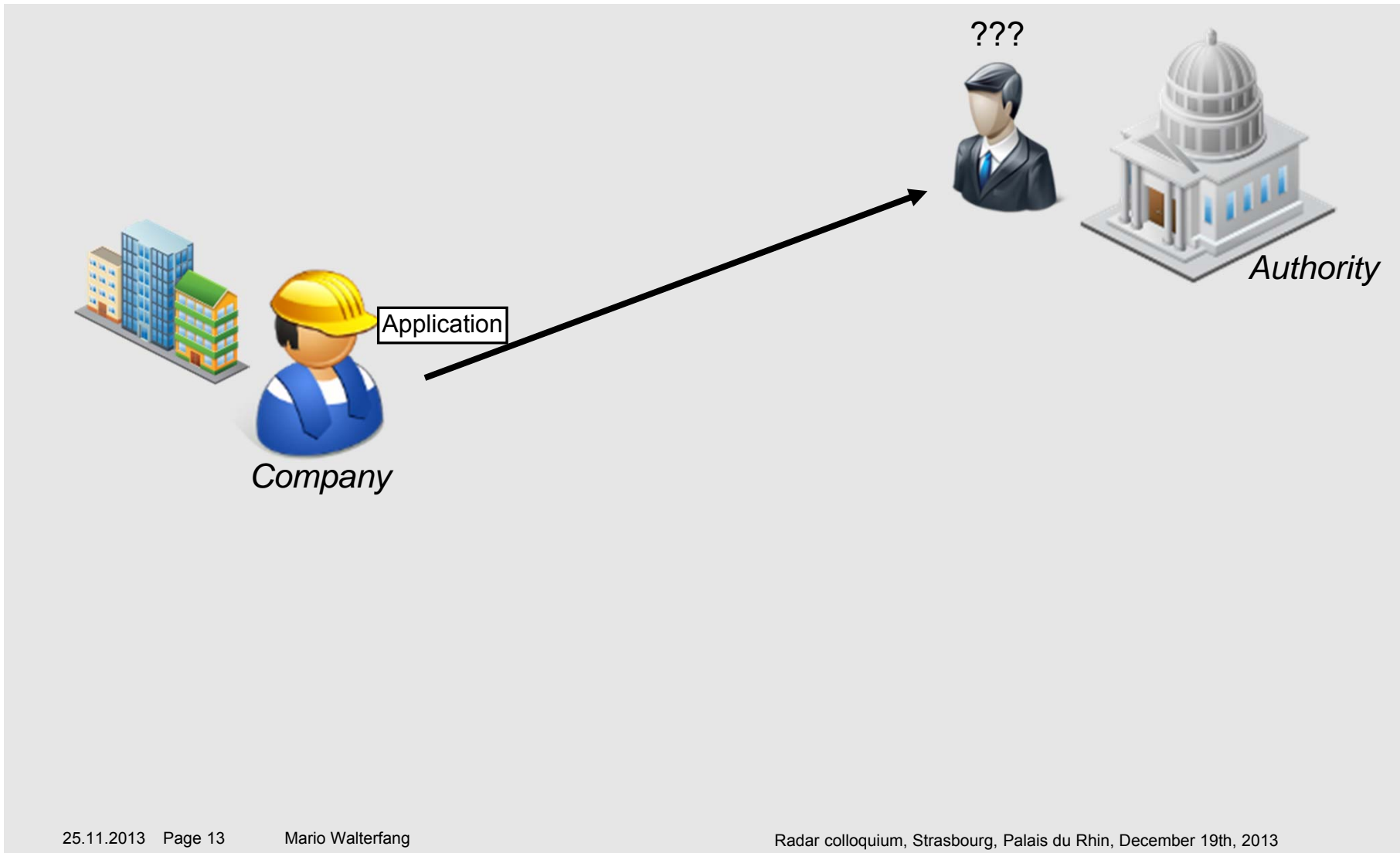


- Shipmaster has been educated to evaluate the quality of radar image
- Shipmaster is in contact with Approved Specialised Firm and in case of problems also with Authority

Wir machen Schifffahrt möglich.



Requirements for becoming an „Approved Specialised Firm“



Wir machen Schifffahrt möglich.



Requirements for becoming an „Approved Specialised Firm“

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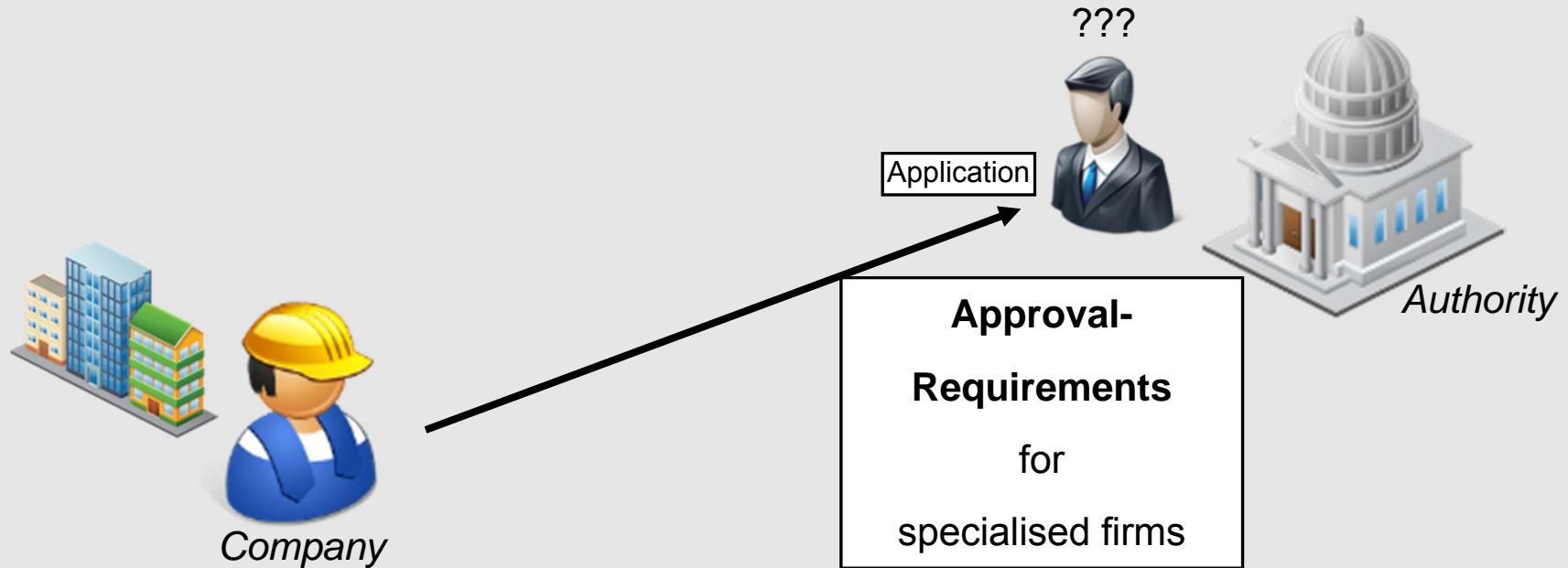
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The Approved Specialised Firm must be
qualified!

Requirements for becoming an „Approved Specialised Firm“



What is meant by „**qualified**“ ?

→ RheinSchUO / ROSR / RVBR does **NOT** give sufficient definition !

Requirements for becoming an „Approved Specialised Firm“

1. Company must have a background in the field of „ship chandler industry“



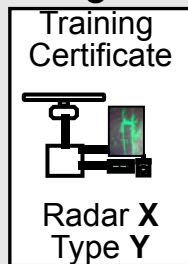
Application



Authority



2. Company has to provide a „training certificate“ for each type of device

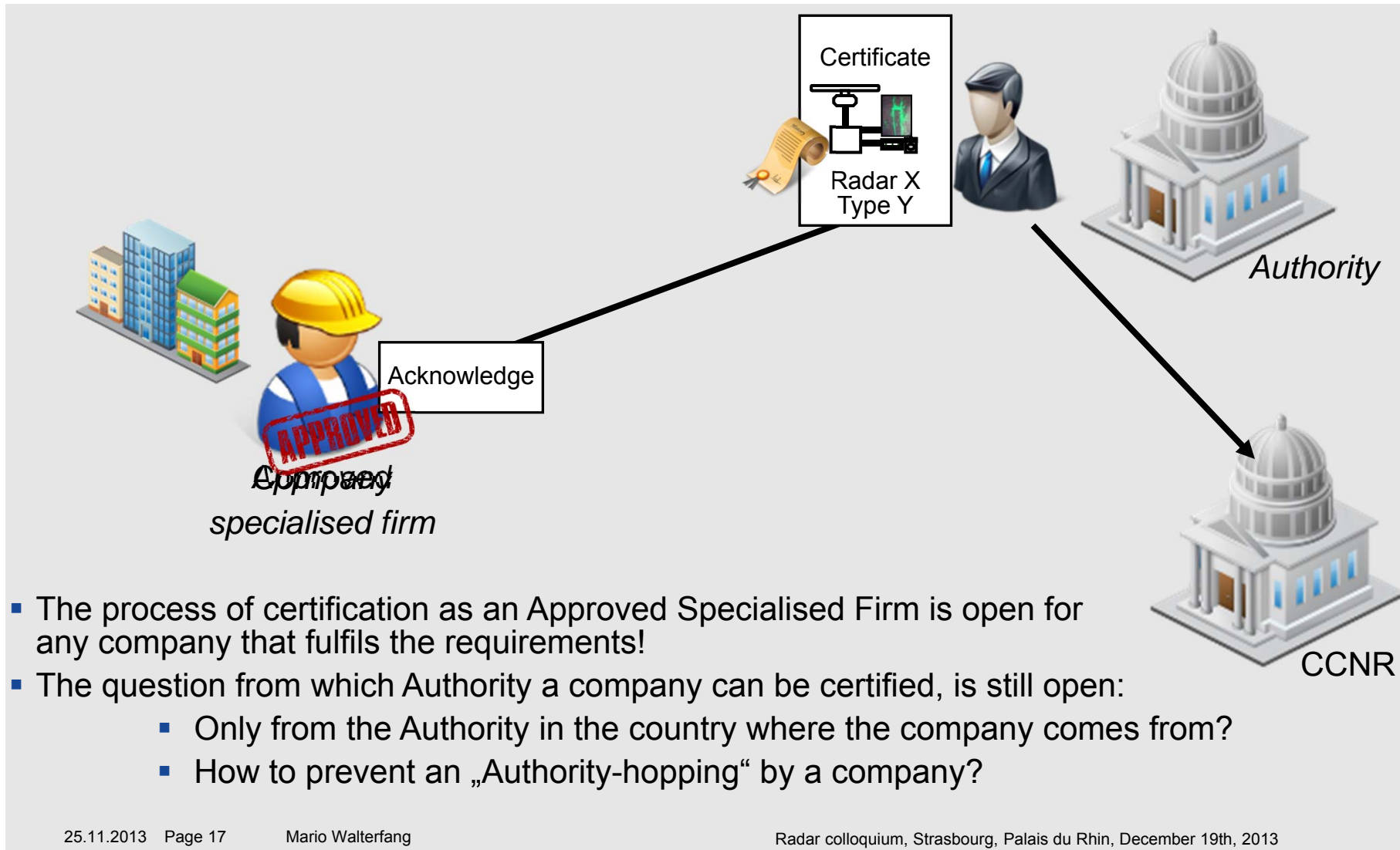


3. Company has to graduate an inquiry by Authority

4. Company must name the qualified persons

5. Company must send a copy of certificate of each installation to Authority

Requirements for becoming an „Approved Specialised Firm“

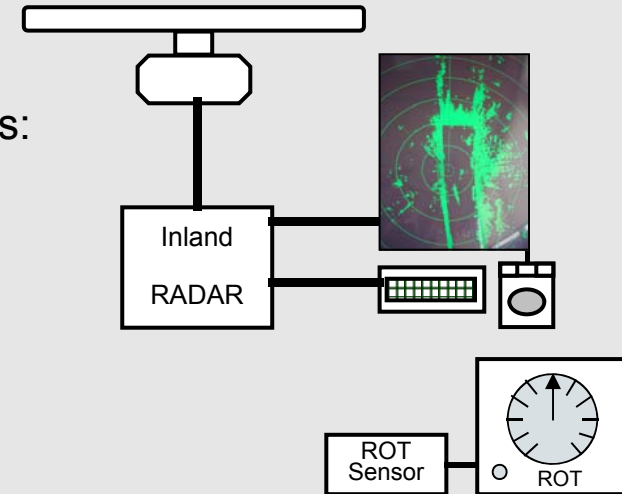


Experiences with Approved Specialised Firms

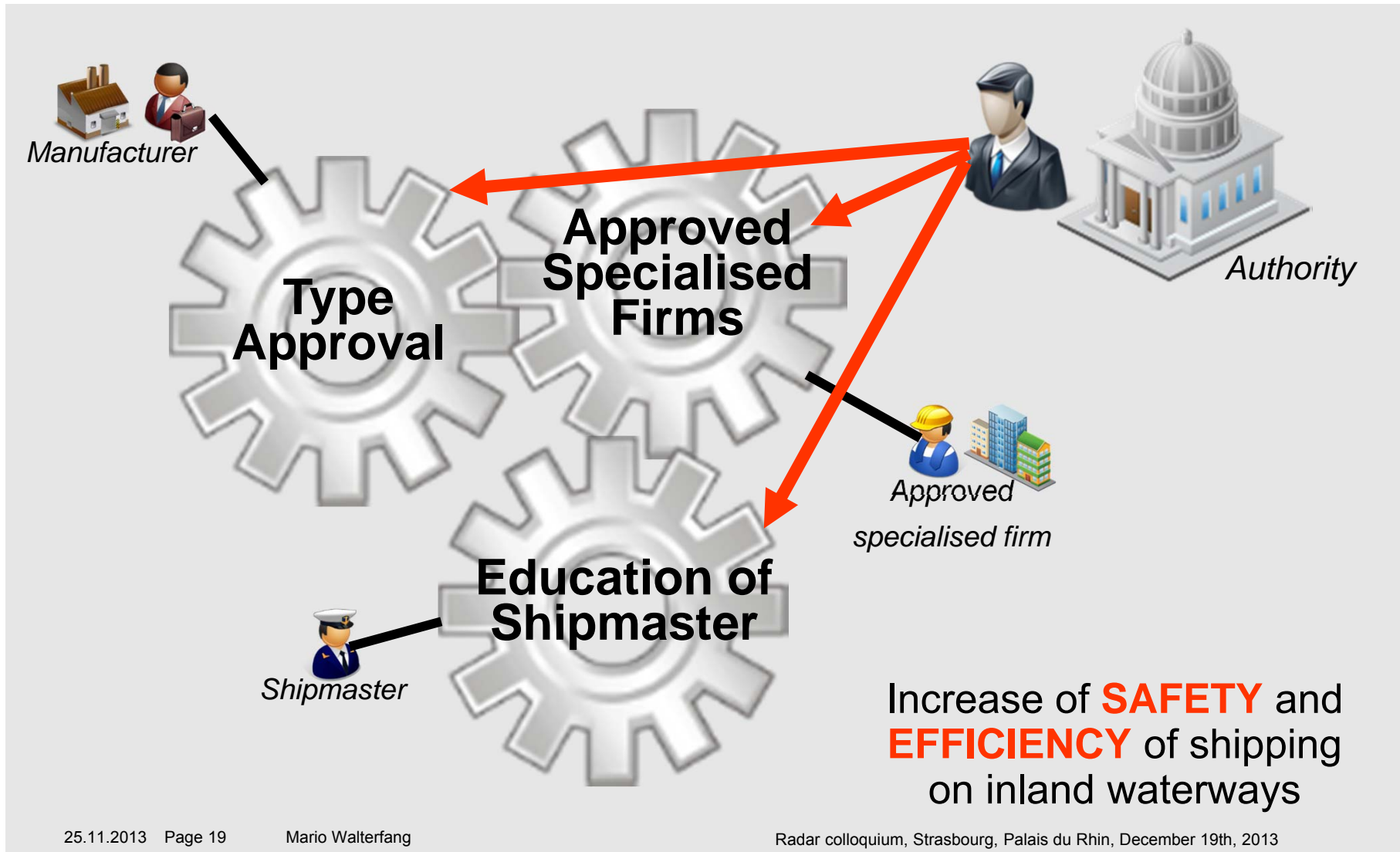
Current Situation:

- 70 Approved Specialised Firms for radar and rate-of-turn indicator devices from CCNR member states:
 - 7 from Belgium
 - 41 from Germany
 - 8 from France
 - 12 from the Netherland
 - 2 from Switzerland

- 5 Approved Specialised Firms for radar and rate-of-turn indicator devices from CCNR non-member states:
 - 1 from Austria
 - 1 from Poland
 - 2 from Slovakia
 - 1 from Hungary



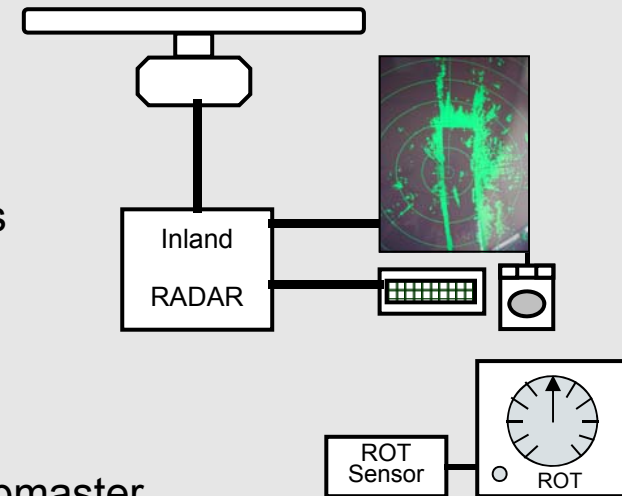
Experiences with Approved Specialised Firms



Experiences with Approved Specialised Firms

1. Radar and Rate-of-Turn-Indicator 1/2

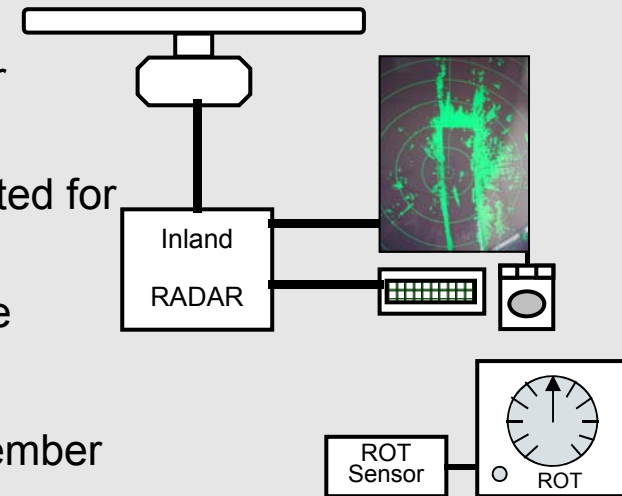
- The quality of installation of radar and rate-of-turn indicator devices has been established on a high level
- Manufacturer, Approved Specialised Firms, shipmasters and the Authority are cooperating in a good manner
- There was almost no major complaints that have been brought to the FVT
- Problems are solved in direct bilateral way between shipmaster and Approved Specialised Firm, because shipmaster has been educated to evaluate the radar image
- Some Approved Specialised Firms have to be reminded to send the “installing certificate” to FVT
- Some companies want to get ASF for one-time installation only
 - this is NOT supported by FVT
 - Approved Specialised Firms with no installation or functional test of equipment for five years lose their certificate



Experiences with Approved Specialised Firms

1. Radar and Rate-of-Turn-Indicator 2/2

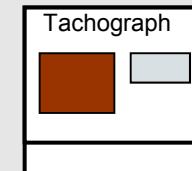
- There is only one list for Approved Specialised Firms for radar and for rate-of-turn indicator
 - It can not be distinguished whether a ASF is certificated for radar and / or ROT
 - It should be discussed, if two separate lists should be introduced
- On the CCNR list of ASF, there are some non-active member
 - list should be adjusted!
- The CCNR list does not include the information for each ASF which type of radar or ROT device it has been certificated for
 - It should be discussed, if this information should be added to the list similar to the tachograph list
 - This might be important for river police doing its stop-and-search operation



Experiences with Approved Specialised Firms

2. Tachographs

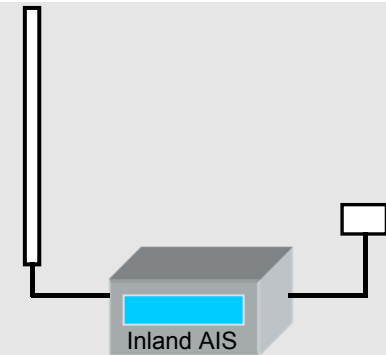
- The quality of installation of tachographs is also quite good
- River police is controlling correct installation very strictly
- Incorrect installation by ASF can have consequences for ship owner



Experiences with Approved Specialised Firms

3. Inland AIS

- There are much more problems with Inland AIS installations compared with radar installations
- There is a significant number of vessels sending out incorrect inland AIS data due to bad configuration
- Not all errors are related to ASF:
 - wrong data input by shipmaster (e.g. navigation status, dimensions (convoys))
 - wrong data input by ASF (e.g. MMSI, ship name → static data)
- Approved Specialised Firms must improve their functional testing after installation of inland AIS devices
- Problem: Normally, it is very difficult to detect the static data error by shipmaster!
 - Perhaps the waterway administrations could surveil the correctness of inland AIS data within their VTS centres River police is controlling correct installation very strictly



Certification of companies from CCNR non-member states 1/3

- Each CCNR member state has its own Authority to certificate companies
- In these countries, the process of certification is well established
- Each radar and rate-of-turn indicator device (and in near future also inland AIS device) on a professional vessel on river Rhine has to be installed by an Approved Specialised Firm, independent of the country the vessel comes from!
 - The questions of interest are:
 1. Who is responsible to certificate a company from a CCNR non-member state, especially from eastern Europe?
 2. Should it be possible to certificate a company from a CCNR non-member state by a CCNR member-state, for example Germany?
- Germany is in a special role, because a lot of vessels from eastern Europe are coming via the German part of Danube river to the river Rhine

Certification of companies from CCNR non-member states 2/3

- Experiences with the certification of companies from CCNR non-member states:
 - In eastern European countries, within the industry, no German language is spoken
 - Companies from these countries are normally not able to read and understand the regulations of CCNR as the regulations of CCNR are not available in English language
 - English language is often understood, but this helps only in conversation
 - A personal inquiry as conducted for German companies, is not practicable due to travelling costs
 - Information about these companies is quite hard to get and a reliable evaluation of the companies are often not possible by Authority

Certification of companies from CCNR non-member states 3/3

- The certification of companies from Austria is no problem as long as the firm is willing to travel to Germany to be interviewed by FVT
- This is also partly valid for companies from Poland, Slovakia, Czech Republic and Hungary due to a lot of people are able to read German language
→ These companies could be certificated by an Authority of a CCNR-member state, e.g. Germany
- It is very difficult for an Authority from a CCNR – member state (e.g. Germany) to certificate companies from the eastern part of Europe
(but this does NOT mean, that these companies are not competent to do the job!)
- EU Directive 2006/87/ec postulates named Authorities, but does not claim each EU member state to establish an Authority to certificate companies as an Approved Specialised Firm explicitly
- The CCNR could develop detailed harmonized criteria for certification

Conclusions

Experiences with the installation and testing of Radar equipment conducted by Approved Specialised Firms (ASF)

- The introduction of Approved Specialised Firms was an important step for more safety and efficiency in inland navigation
- The certification procedure by a named Authority is well established in the CCNR member states
- A harmonisation of what is meant by „a company must be qualified“ may be helpful
- The experiences with the ASFs are all in all quite good
- The question of how to proceed with the certification of companies from CCNR non-member states (especially from eastern European) is not solved yet

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Thank you very much for your attention!

