



STUDIECENTRUM VOOR KERNENERGIE
CENTRE D'ETUDE DE L'ENERGIE NUCLEAIRE



First conclusions from the Belgian stakeholder panel

FP 7 PREPARE WG 3 "Consumer Goods"

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Composition of the stakeholder panel

- Organisations with roles and responsibilities in emergency management
- Stakeholders
- => reactivate & extend the FARMING stakeholder panel
- Composition (so far)
 - Federal Agencies: Nuclear Control (FANC-AFCN); Security of the Food Chain (FAVV-AFSCA)
 - Relevant ministries (Public Health; Environment, Nature and Energy (LNE) of the Flemish Government)
 - Farmers' unions: Boerenbond, FWA, ABS
 - Belgian Confederation for Dairy Industry (BCZ-CBL)
 - Food Industry Federation – FEVIA
 - Waste management agency: (NIRAS-ONDRAF) + daughter company BELGOPROCESS
 - CONTROLATOM (certified inspection body); IRE & SCK•CEN (research institutes
 - Private companies

- Activities foreseen

- 'Dissensus' Delphi survey
 - October 2013- January 2014
- Panel meeting on contaminated food products
 - 25 April 2014
- Panel meeting on other consumer goods
 - To be decided (late 2014 or early 2015)

+ Analysis of relevant public opinion and media data

The Delphi survey

- Aim
 - Collect opinions from various stakeholders in order to identify issues of importance
- Participants
 - 17 members of organisations involved in the Belgian stakeholder panel
- 2 rounds of questions (15+3)
 - Logistic and design support from U. Liège for web survey
- Report distributed to participants in the Delphi and or/ panel meeting on contaminated food

- Identify key concepts /issues and relations between these
- Cloud tags

Example question:

Should norms applied internally be the same as for export (EU market)?

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At EU level

World Level

Harmonisation

The same

Lower internally

Higher internally

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COMMUNICATION

Consistency

Transparency

Safety/Precaution

Flexibility

Justice

Fairness

Socio-economic conditions

Credibility

Free Market

Domestic food production

Local: If food is consumed a lot, or the opposite

Famine

Viability of an economic sector

Example of cloud tag

After the accident in Fukushima, the maximal radioactivity levels for food consumption in Japan were repeatedly decreased by the Japanese authorities.

In case of an accident, should the radioactivity levels for food consumption in Belgium be revised after a given period?

comparison_past consistency could_be_higher could_be_lower domestic logistics no-revision
pragmatism **precaution** **revision** standardisation trust

- Getting a good overview of the situation is essential
 - Inherent logistic difficulties, e.g. related to measurements
 - Most participants were favourable to involving other stakeholders in the measurement of radioactivity in goods (food or non-food)
 - This can give clarity, reassurance
 - Need to establish: training programmes, equipment, method & calibration procedure, expert feed-back, quality control procedures and standard measurement formularies
 - Who? Individuals, dedicated laboratories in companies, central pool?
 - » Preparedness phase? Not possible to prepare everything in advance
 - The purpose of measurements should be clear
 - » E.g. compliance with legal norms or risk estimation
 - Professional and consumer's organisations should be involved
 - More feasible on bulk goods, such that the geometry of the measured object can be easily determined

- Need for standardisation and harmonisation
 - Technical
 - Measurement procedures, calibrations, use of similar measurement devices, response of interveners
 - Legal
 - Europe and worldwide
 - Similar levels for the European and the Belgian market
 - Coherence, justice, clarity, free market
 - Specific norms for internal use in Belgium only for very particular cases
 - Domestic production, local consumption habits
- Standardisation and harmonisation can decrease uncertainty

- Legal norms: **tension** between:
 - "If norms are justified, no need to be stricter or less strict, "below norms is safe"
 - → Consumer's acceptance?
 - "Below norms doesn't mean acceptance", "emotions will always play a role"
 - → Food spill, economic consequences, (dis)trust
- Most participants favoured **predefined levels**, at least during the crisis. Opinions divided between:
 - Not revised: clarity and consistency of actions, credibility of the experts and authorities
 - Flexible: for precaution or in exceptional situations
- A conservative attitude aiming to discard any product with residual contamination is not favoured, but has been often adopted in practice in past (non-radiological) crises

- **Communication** is a key issue
 - With the general public, between the emergency management actors and with the affected stakeholders
 - Related difficulties
 - Communication flow, content and timing
- Communication material (checklists, formularies or leaflets) prepared in advance
 - **General** knowledge (e.g. norms, measurement units for radioactivity and dose) & **specific to a crisis** situation
 - A list of receivers of specific information should be made and updated regularly
- Need for a central "helpdesk" (contact point for stakeholders), a call centre and/or website continuously updated
- Responsibilities for communication should be clarified (esp. post-accident)
 - Different actors could take this role in the post-accident phase

- Limitations and issues of existing legislation & guidance
 - Complex EU legislation, with differences between normal and post-accidental situations
 - Inadequacy of current transport legislation to deal with e.g. contaminated containers
 - Zero tolerance to radioactivity in certain consumer goods such as cosmetics
 - Need for a legislation covering non-food goods
 - Some argued that this legislation should differentiate between:
 - goods for personal vs. industrial use;
 - products in direct contact with the body;
 - products that can cause internal contamination;
 - imported goods vs. goods used in the affected area

- Control of goods
 - Most difficult if transported via road traffic
 - Goods should have their origin and "non-contamination" certified.
 - Portals could be installed on main traffic roads, possibly with mobile control points on secondary roads
 - Random sampling and analysis
 - Reinstating the old state borders?
 - + : feasibility, practicability
 - - : contradiction with free movement of goods in EU
- Temporary storage (buffer zones)?
 - Pro's & contra's
 - Investigate possible sites in the preparedness phase?

The panel meeting on
contaminated food



Agenda

| | | |
|----------------------|----------------------------------------------------|---------------------------------------------|
| 09:00-09:15 | Welcome Presentation and approval of the agenda | C. Turcanu & G.Olyslaegers (SCK•CEN) |
| 09:15-09:30 | Round table and introduction of the participants | |
| 09:30 – 09:40 | Presentation of the PREPARE project | C. Turcanu (SCK•CEN) |
| 09:40-09:55 | The FARMING experience | C. Vandecasteele (FANC-AFCN) |
| 09:55-10:10 | Coffee break | |
| 10:10-12:15 | Moderated discussion | G. Olyslaegers & N. Rossignol |
| 12:15-12:30 | Closing of the panel | |
| 12:30-14:00 | Lunch | |

Panel discussion

- 14 participants from 10 organisations
- Discussion centred around:
 - Conclusions of the previous (FARMING project) panel
 - Current responsibilities related to management of contaminated food
 - Issues, problems

- Fictive scenario
 - Nuclear accident at Gravelines NPP
 - No sheltering or even distribution of iodine tablets needed in Belgium (in France only in a very limited area around Gravelines).
 - Actions for food needed for about 3 months after the accident, in both Flanders and Wallonia
- Place different **actions** (max. 3 most important) and **issues** faced by your organisation on a time line



Time 0 (release time)

1 month

3 months
(restrictions
finished?)

Panel discussion



Panel discussion

Draft findings (1)

- The FARMING panel concluded that authorities would probably favour a conservative attitude. Is this still the case?
 - Nowadays consumer more aware & concerned about food safety
 - Lessons learned from Fukushima
 - Cascading effect (production – processing – distribution – retail – **consumer**)
 - Efficient allocation of resources

But:

- Several food crises occurred shortly before / during the FARMING project
- At the time of FARMING, the concept of “food safety” was quite new
 - Currently Food Agency controls and can trace back products, below norms is safe
- Surface dedicated for agriculture, as well as the number of farmers, continue to decrease
- Who pays the costs?
 - A **compensation scheme** should be drafted in the **preparedness** phase
- Farmers ask for a graded approach

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Need to prepare a
communication
plan

- Existing documents & data

- Current emergency plan covers the crisis phase only
- Revision (foreseen) of the emergency plan should address:
 - Involvement of other stakeholders
 - Protocols & communication between the federal level (nuclear) and the regions (all other issues concerning environment, agriculture, etc)
 - Nuclear should benefit from cross-feeding with other types of crises
 - Socio-economic evaluations
 - Is the current plan looking also at the stakeholders or is it centred on the general public?
 - ECOSOC cell of the Federal Crisis Coordination Committee to be replaced by a structure including crisis cells of various organisations
- Protocols for liberation of food products / areas exist, but have to be re-assessed
- Better transfer of knowledge among and to various stakeholders
 - Possible countermeasures (e.g. EURANOS handbook) & databases (e.g. who has which data?)

Panel discussion

Draft findings (3)

- The crisis impact will also be felt on:
 - Producers outside the area, but where animals are fed with food produced locally in the area
 - All producers in the area, even if their own products are not contaminated
 - Whole market sectors
 - E.g. Belgian pralines refused during a previous food crisis
 - New laws are currently being discussed at European level concerning the traceability of the origin of the raw product => this could amplify the impact of potential contaminations
 - Long term
- Need to reflect more on the post-accident management
 - Responsibilities, priorities, communication (to the public, local population, companies, etc.)
 - Capacities
 - Monitoring
 - Waste management
 - Guidance could be drafted on what can be done in certain scenarios

- Preparedness
 - Scenarios or flexibility?
 - Scenarios allow making action plans, but cannot cover everything
 - Flexibility means defining an evaluation procedure with various experts that will decide depending on the situation, but generates uncertainty among some stakeholders
 - Increase of capacities should follow a cost-benefit analysis
 - More exercises focused on the post-accident phase are needed

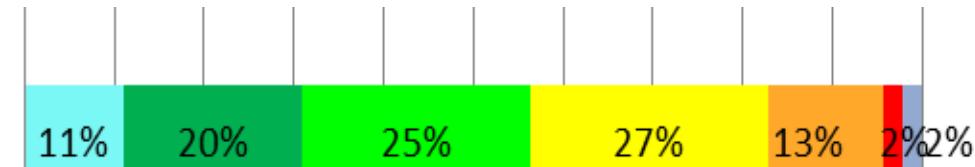
Insights into public opinion 

Public opinion about contaminated consumer goods

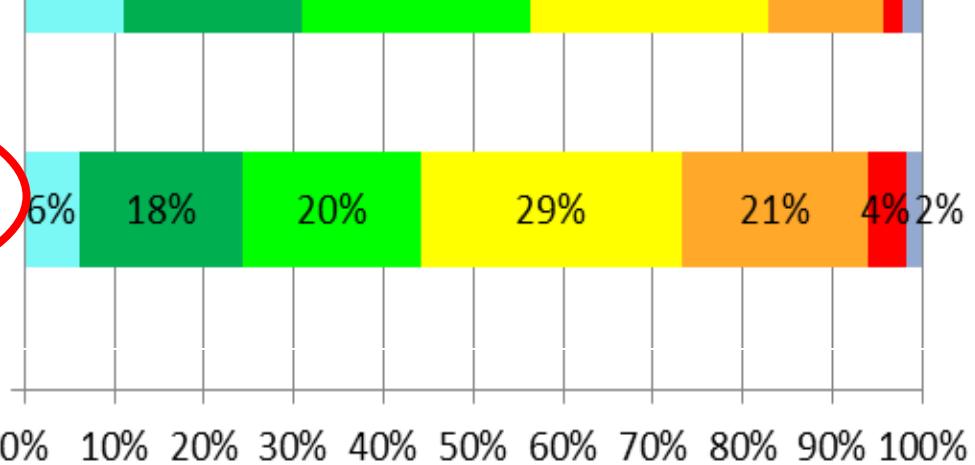
Large scale opinion survey in Belgium (Aug.-Sept. 2013)

How do you perceive the risk to your health in the near or far future due to

Radiation from the Fukushima accident



Radioactivity in food or other products from Japan

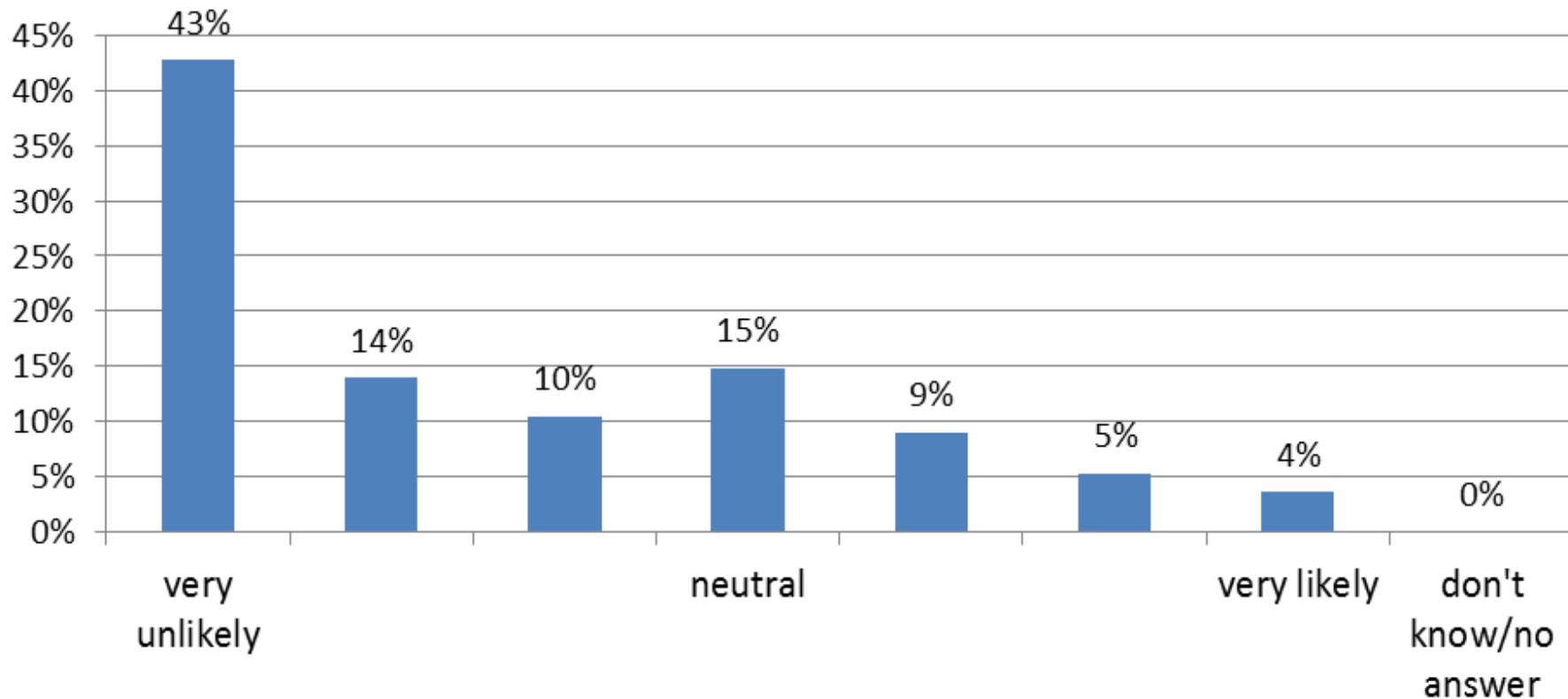


■ No risk ■ Very low ■ Low ■ Medium ■ High ■ Very high ■ DN/NA

N=943

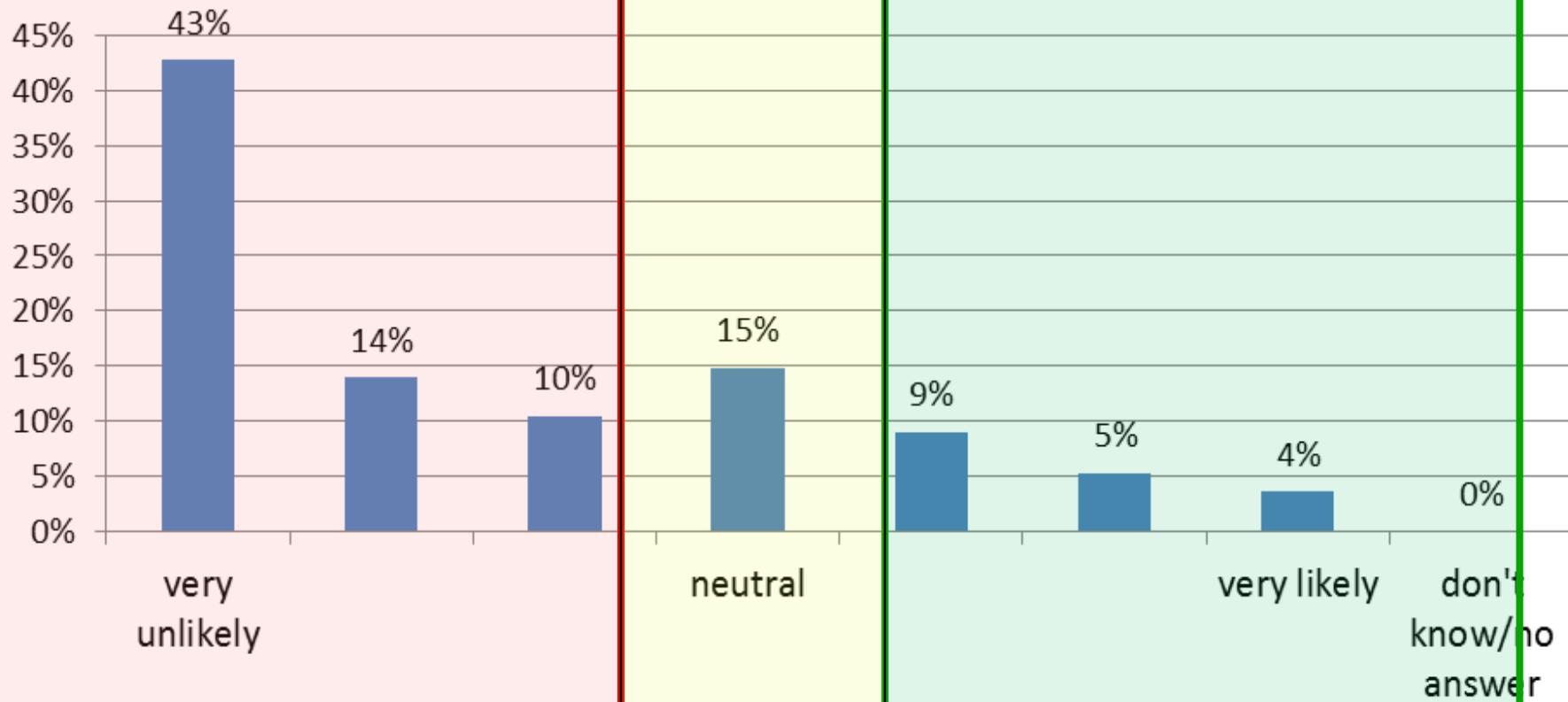
Reluctance towards consumer goods with residual radioactivity

Would you consume food products from Fukushima (fish, tea, rice, etc) if these satisfy the legal norms specifying maximal levels of radioactivity in food?



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Influencing factors for consumer's behaviour

- Attitude towards the product
 - Does it make them anxious?
 - Do they think consumption is justified?
 - Does this raise health concerns?
- Subjective norms
 - Would their close environment support this?
- Trust in legal norms

Explain
>30% of the variance in planned behaviour

- Behaviour in past food crises &
- Trust in the control on food safety

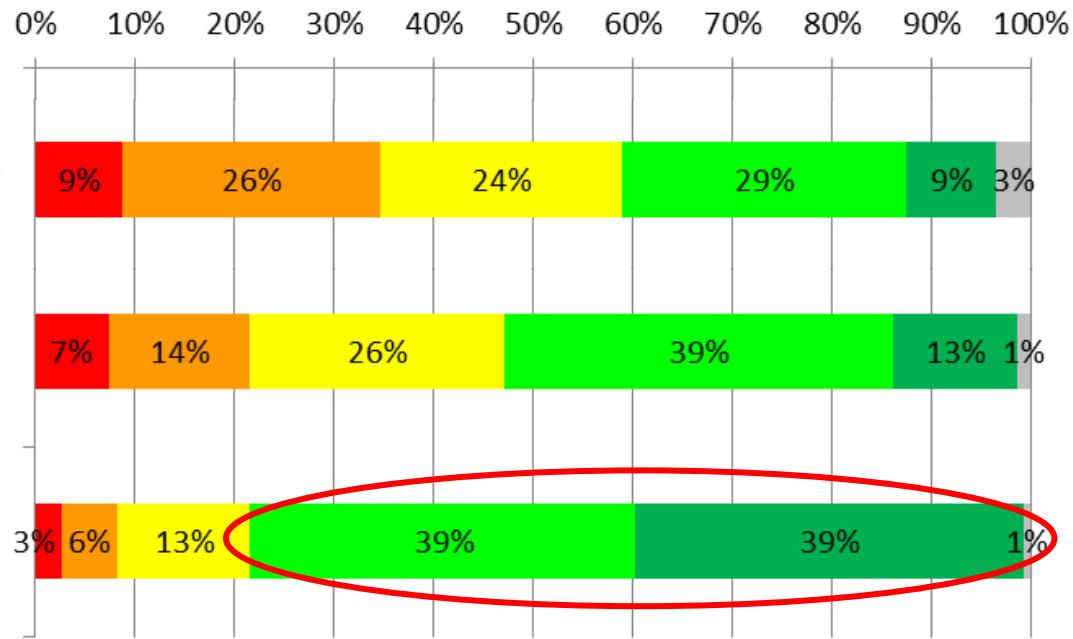
Also correlated with behaviour, but low predictive power

38% say radioactivity satisfying legal norms is not dangerous, but 80% would buy something else

Food products with radioactivity below legal norms are not dangerous for our health

I trust national authorities w.r.t. control of radioactivity in food

I prefer to pay more for food products without radioactivity



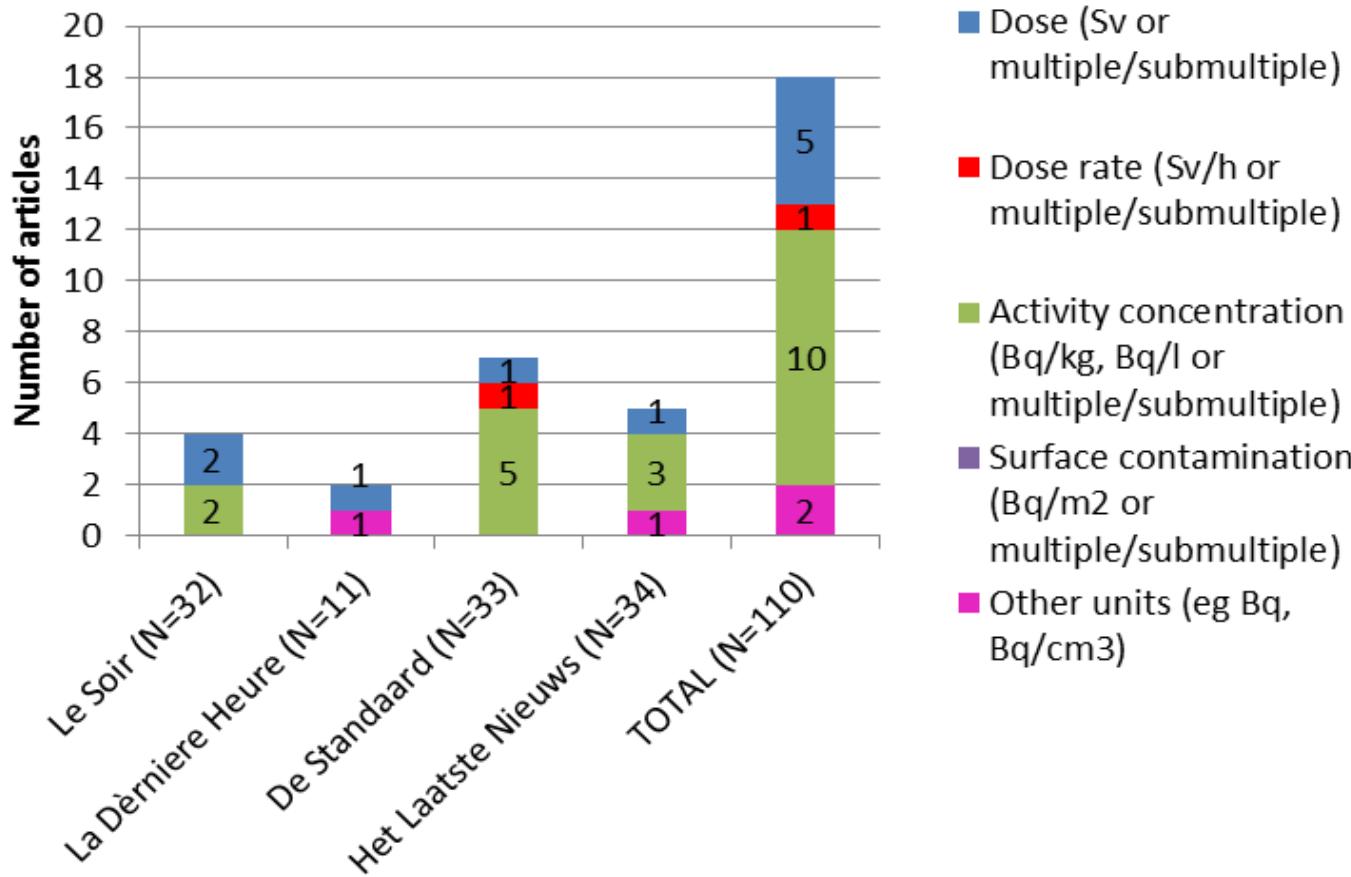
■ strongly disagree ■ disagree ■ neither agree, nor disagree ■ agree ■ strongly agree ■ don't know/no answer

Insights into media reporting 

Food contamination in the media

Articles about Fukushima in four Belgian newspapers (11 March 2011-25 March 2012)

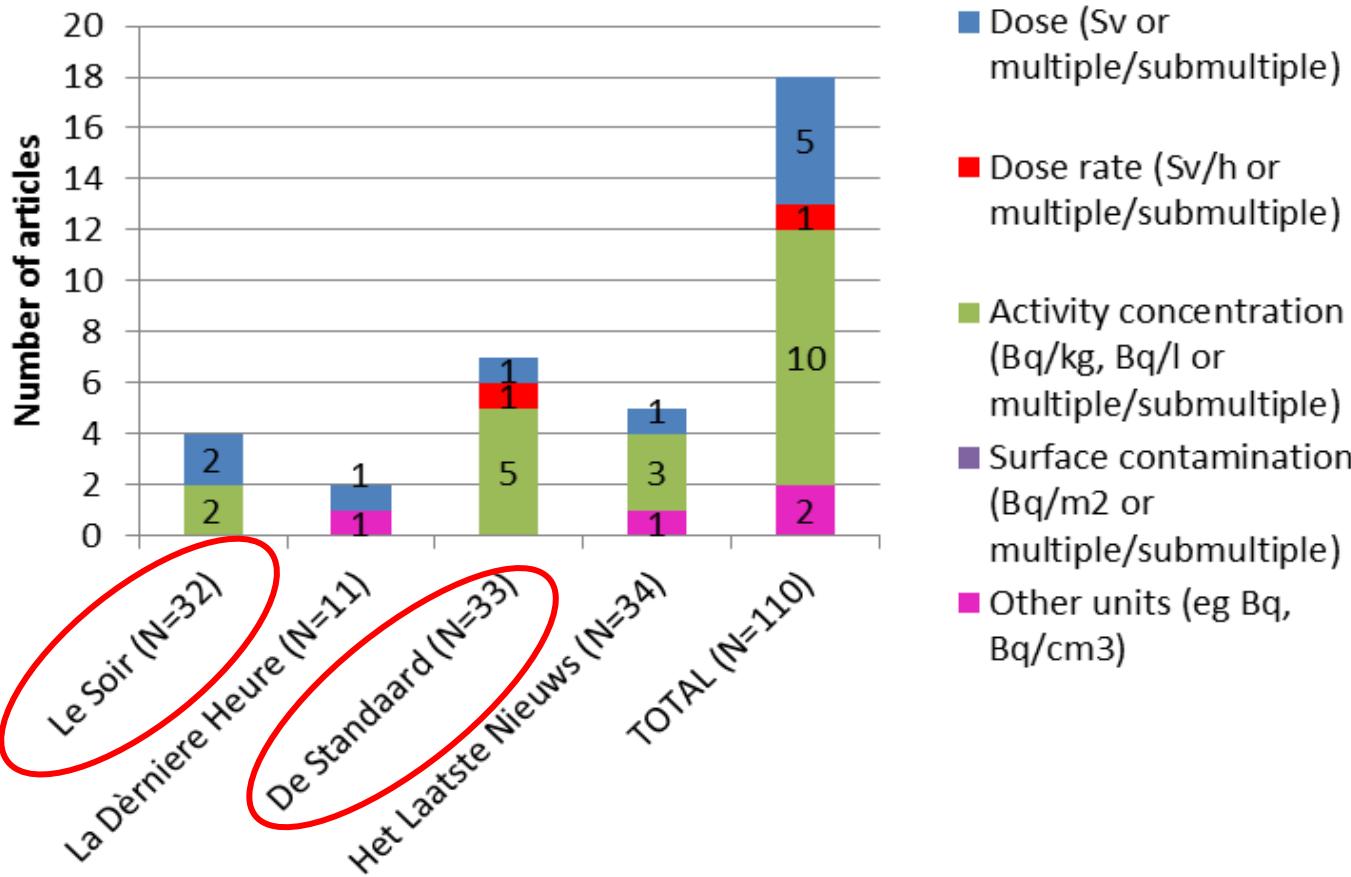
Radiation-related units reported in articles addressing radiocontamination in the food chain



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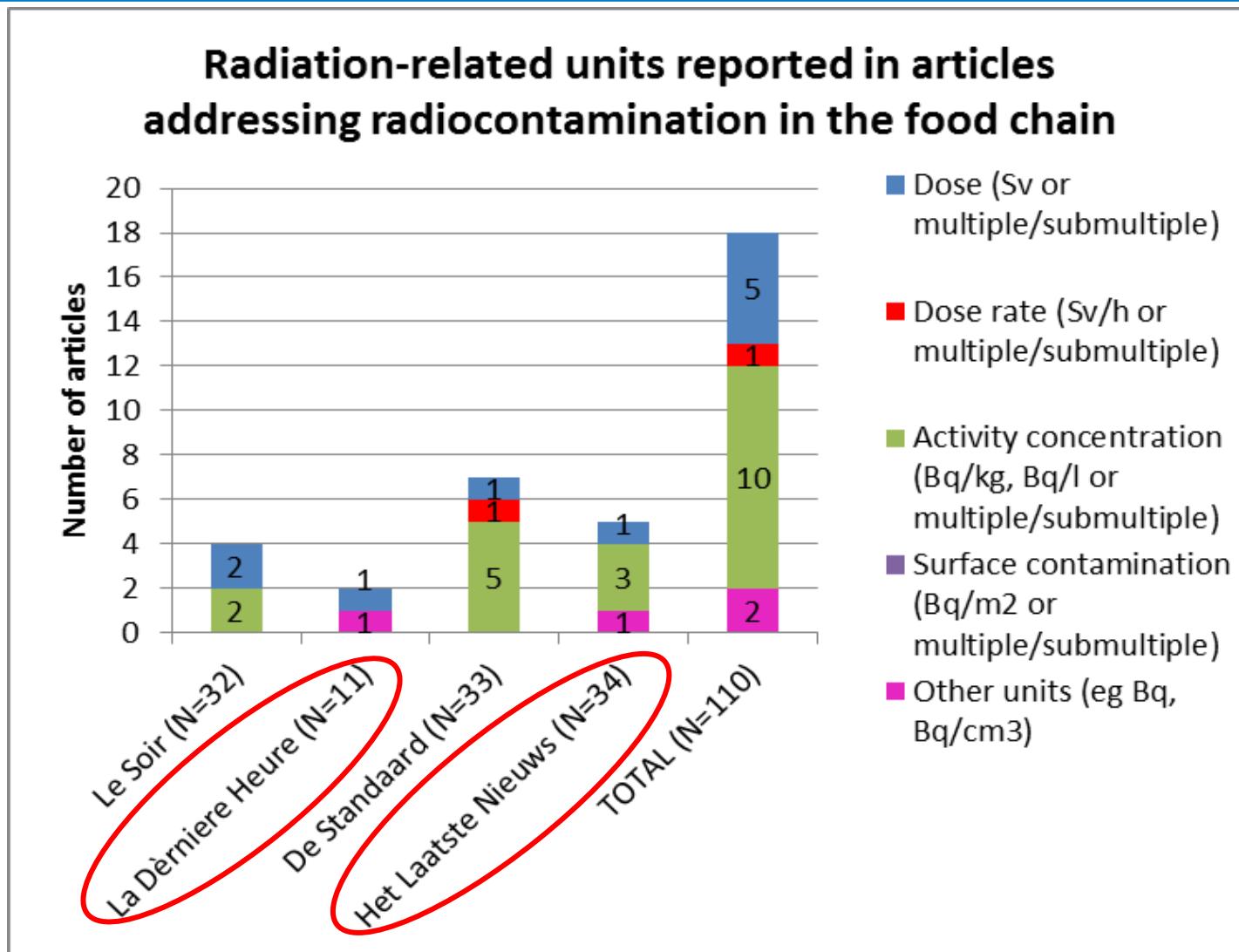
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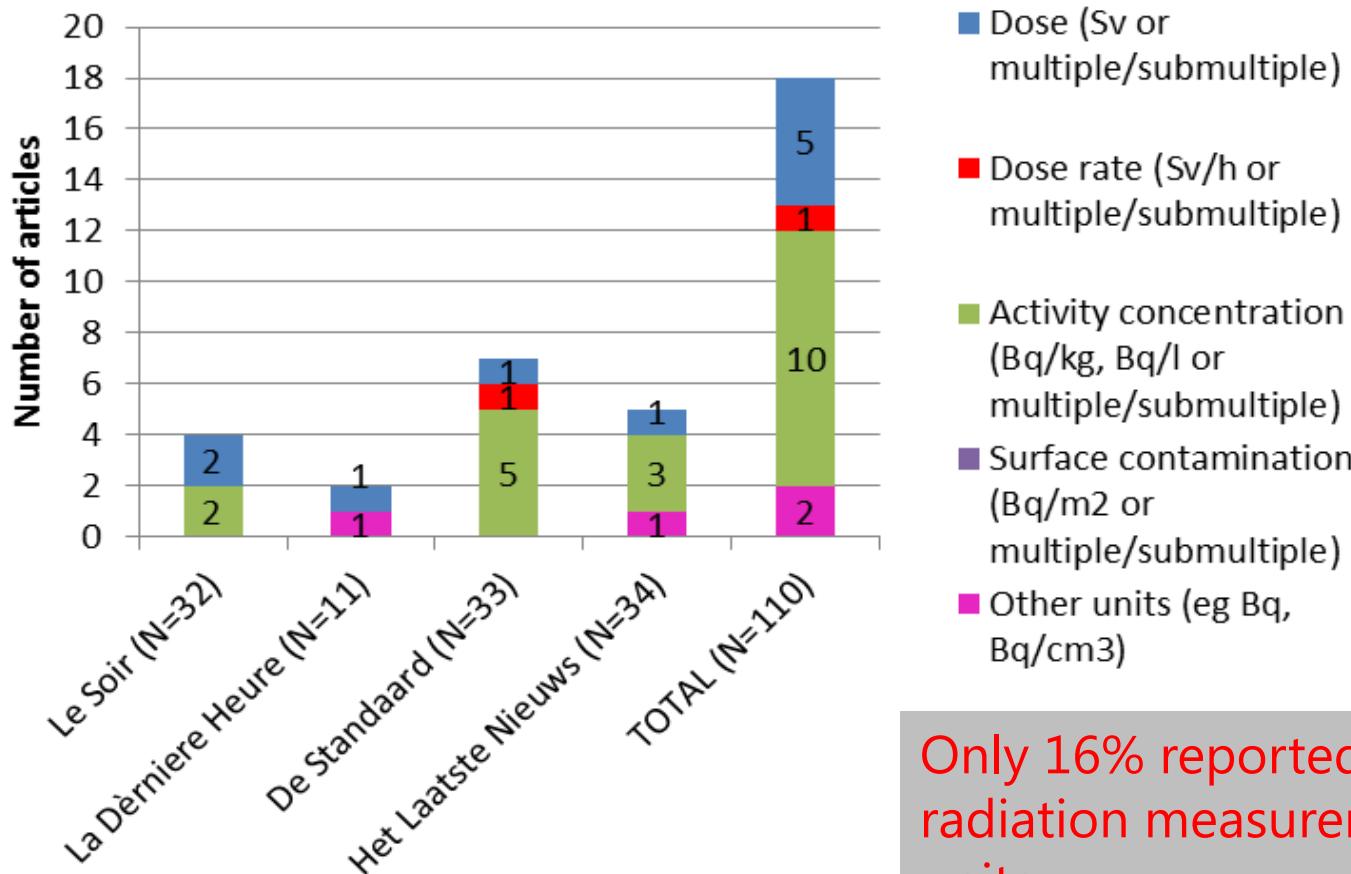
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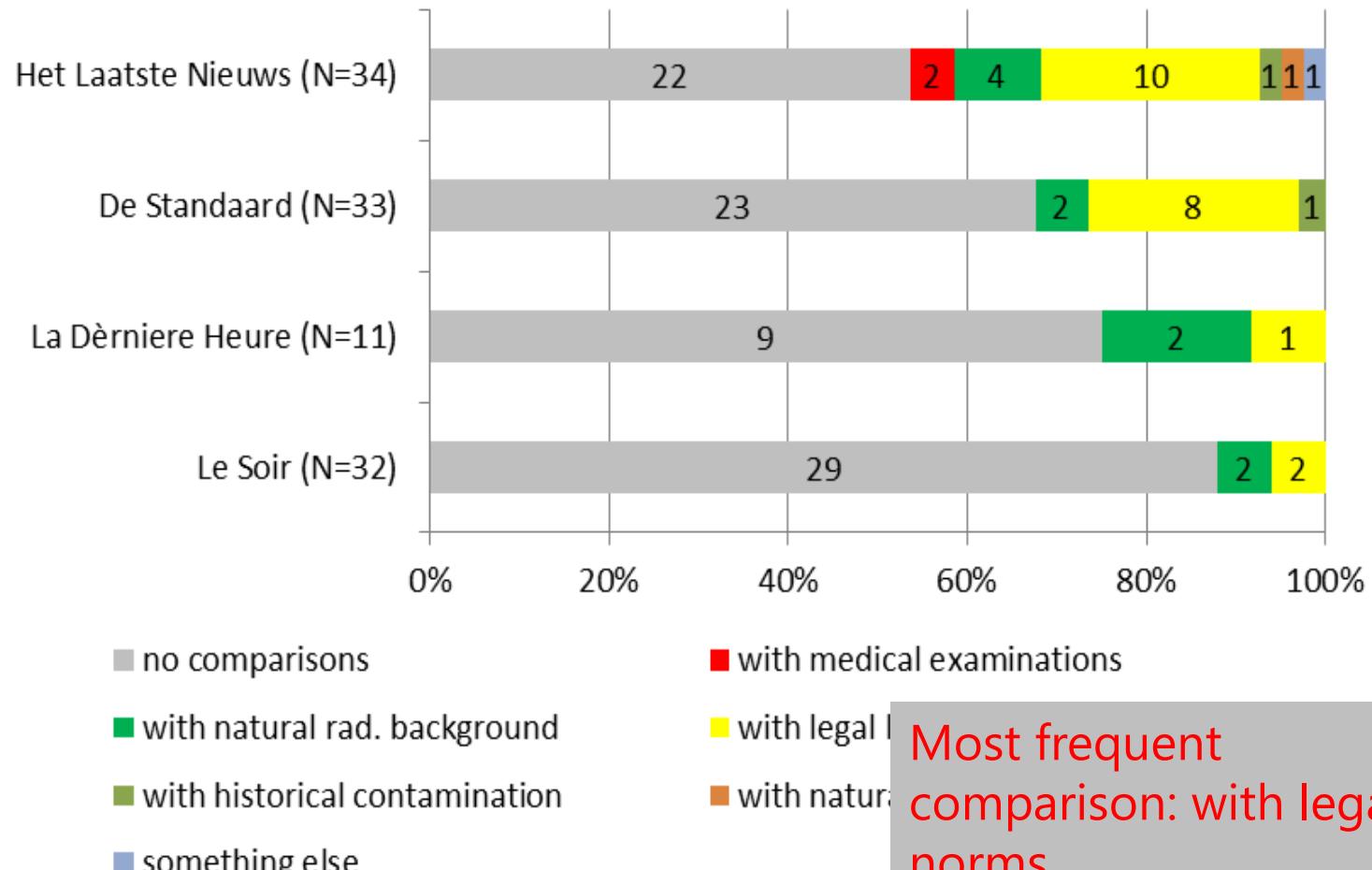


Only 16% reported
radiation measurement
units

Food contamination in the media

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Risk comparisons in articles addressing food issues



- Harmonisation of regulation, approaches, ...
 - Trust in legal norms is a key factor
 - How to deal with MPL's?
- National legislation
 - Broader involvement of stakeholders
 - Socio-economic consequences
 - More attention to post-accident phase
- Better transfer of knowledge
- Communication with the consumer: "how to communicate that the product is safe"?