

# Food Safety, Regulations and Standards

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# Responsibilities considering food safety

## Voedselveiligheid in Nederland: hoe geregeld?

*Veilig voedsel is de verantwoordelijkheid van iedereen.*

Europese + Nationale wet- en regelgeving



**VWS**.....

Voedselveiligheid in de gehele productieketen tot en met de consument, met uitzondering van onderdelen waarvoor LNV verantwoordelijk is.



**LNV**.....

- Verantwoorde toepassing van o.a. diergeneesmiddelen en dierlijke bijproducten tijdens primaire productie



- Toelating van gewasbeschermingsmiddelen



- Diervoederveiligheid

- Slachten en uitsnijden van vlees, incl. bewaring in koel- en vrieshuizen

Rijksoverheid (LNV en VWS)

Ondernemer

De ondernemers zijn primair verantwoordelijk voor de voedselveiligheid tijdens productie, verwerking, opslag en verkoop van voedsel en diervoeders.

VWS / LNV

**VOEDSEL-VEILIGHEID**

NVWA

De NVWA is o.a. verantwoordelijk voor toezicht en handhaving op het terrein van voedsel en diervoeders.

Consument

De consument moet het voedsel op veilige wijze bewaren en bereiden.

# Legislation & standards in practice

## Example: Research project for Ministry of LNV and NVWA-BuRO with the following deliverables:

- Indication of variations of concentrations of heavy metals and iodine in Dutch seaweed cultivation locations
- Screening on other possible risk substances, like dioxins, pesticides and (marine) toxins
- Impression of possible food safety risks in Ulva and Saccharina
- Sampling protocol for taking representative samples

## Research questions:

- Which standards for analysis of the possible risk substances are already available ?
- How many samples should we take to consider these representative for the whole seaweed cultivation site ?
- What levels of contaminants measured do we consider as possible risks for human consumption ?

## This needs:

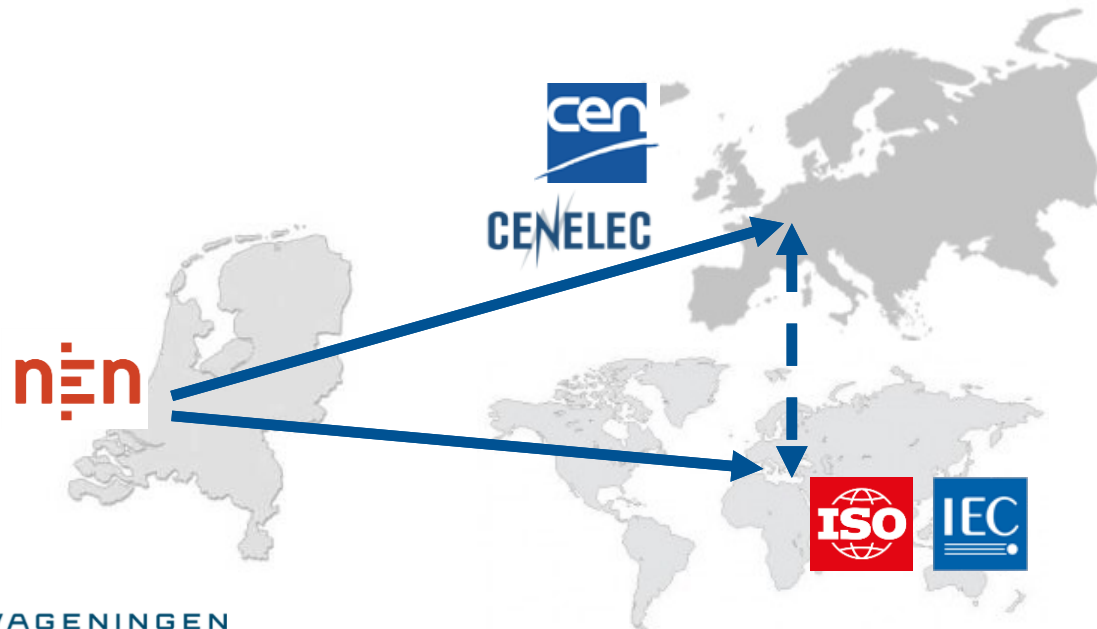
- Standardisation
- Legislation



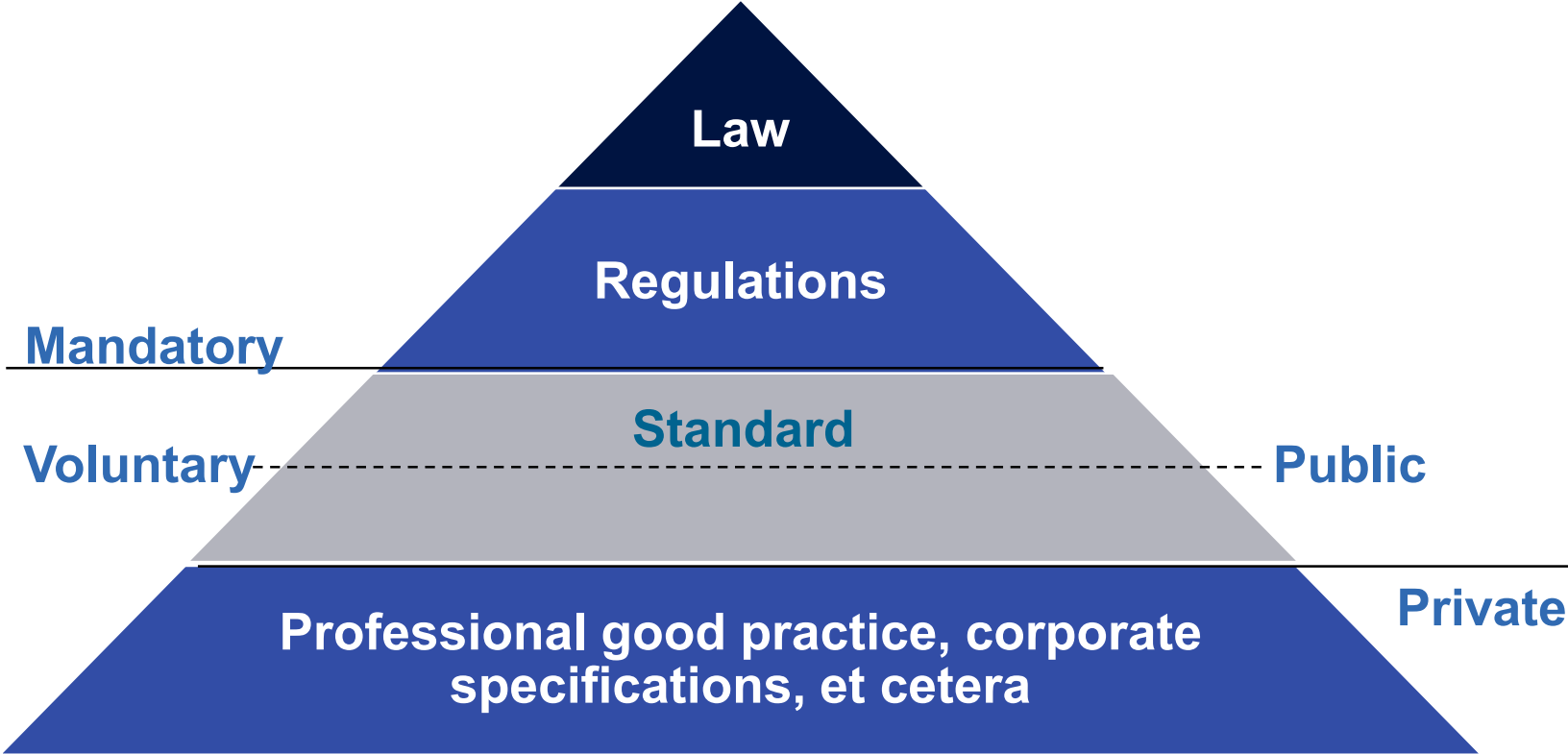
# European Standards

## Standard development:

- CEN is the European standardization organisation
- National Standardization Bodies (NSB), such as NEN, are member of CEN
- NSBs delegate experts to CEN working groups to develop the standards
- Standard development is consensus based and follows a specific set of rules to maximize transparency and the involvement of stakeholders
- NSBs are obligated to cooperate in the standardization processes of CEN and to adopt European standards on the national level
- Advantage: the same standards in 34 countries



# Relation between standards, laws and regulations



# Ongoing standardization work mandated by the European Commission

## Already published:

- EN 17399:2020: *Algae and algae products – Terms and definitions*
- CEN/TR 17559:2021 *Technical Report for food and feed applications: General overview of limits, procedures and analytical methods*
- (CEN/TR 17611 and 17612 Technical reports on cosmetic and pharmaceutical applications)

## Expected in 2021:

- EN 17477: *Algae and algae products - Identification of the biomass of microalgae, macroalgae, cyanobacteria and Labyrinthulomycetes - Detection and identification with morphological and/or molecular methods*
- EN 17605: *Algae and algae products - Methods of sampling and analysis - Sample treatment*
- (EN 17480 *Algae and algae products - Methods for the determination of productivity of algae growth sites*)
- (Technical report for chemical and biofuel applications)

NEN-EN 17399:2020

EUROPEAN STANDARD

**EN 17399**

NORME EUROPÉENNE

EUROPÄISCHE NORM

March 2020

ICS 13.020.55; 01.040.13

English Version

**Algae and algae products - Terms and definitions**

Algues et produits d'algues - Termes et définitions

Algen und Algenprodukte - Begriffe

This European Standard was approved by CEN on 3 February 2020.

CEN members are bound to comply with the CEN/CENELEC Internal Regulations which stipulate the conditions for giving this European Standard the status of a national standard without any alteration. Up-to-date lists and bibliographical references concerning such national standards may be obtained on application to the CEN-CENELEC Management Centre or to any CEN member.

This European Standard exists in three official versions (English, French, German). A version in any other language made by translation under the responsibility of a CEN member into its own language and notified to the CEN-CENELEC Management Centre has the same status as the official versions.

CEN members are the national standards bodies of Austria, Belgium, Bulgaria, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Republic of North Macedonia, Romania, Serbia, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey and United Kingdom.

# Looking forward in European standardization and research

## Standardized test methods to be expected in the coming 3-4 years:

- Chlorophyll
- Lipids
- Heavy metals/toxins
- Proteins
- Amino acids
- Polysaccharides
- Pigments
- Phycobiliproteins
- Fatty acids
- Sampling and sampling strategy

## Research questions:

- Understanding (and possibly) influencing the uptake of contaminants and nutrients
- Possibilities to decrease the amount of contaminants in seaweed (based) products, while leaving the nutrients intact



## Protocol for fresh seaweed sample collection

Version 1.0 – May 2020

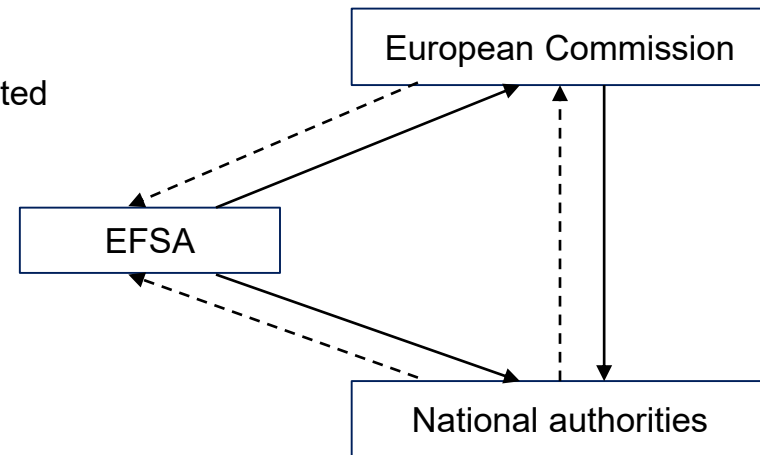
# Current food Safety Regulations

## Current legislation framework:

- Food legislation: EG 1881/2006: no maximum levels for heavy metals, inorganic arsenic and iodine in seaweed (based) products defined
- For seaweed (based) products currently only maximum allowed levels are available for:
  - Concentrations of heavy metals in supplements (EU 1881/2006).
  - Concentrations of heavy metals when applied in animal feed (EU 32/2002)
  - EU recommendation considering monitoring of iodine concentrations in seaweed (based) products (EU 464/2018)

## Development of new legislation:

- European Commission
  - Provides for recommendations and legislation
- EFSA:
  - Advises considering possible risk substances, almost always not product related
  - Several scientific panels:
    - Contamination panel
    - Food additives and flavourings
    - Nutrition, Novel foods and Food allergy panel
- National Authorities
  - Can publish opinions regarding risk substances (e.g. TDI/TWI/UL)
  - Can set maximum levels when no European legislation is available





# Questions?



**First, any questions *from* the audience?**

**Second, some questions *to* the audience:**

- What would be a priority for research and/or standards to help further development of the seaweed sector ?
- What do you know about the current concentrations of contaminants (heavy metals), iodine and nutrients (sugars, proteins and lipids) in your seaweed (based) products ?

# Contact info

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