The TraceFood Wiki and foodtraceability site
- platforms for information and cooperation

Dr. Finn Olav Bjørnson,
SINTEF Fisheries and Aquaculture

Traceability Workshop, Des Moines, Iowa, USA, June 11th 2009
This presentation

FoodTraceability.eu
- Site content
- Site structure

The TraceFood wiki
- GTP from word to wiki
- What is a wiki?
- Collaborative authoring
- The TraceFood wiki structure
Welcome to Tracing your food!

This page tries to provide you with an introduction into the world of food traceability. Traceability is simple and a legal requirement in some parts of the world, such as the European Union. However, different people think very differently about traceability. We have tried to respect this variety of mindsets by giving a space to each of the different Viewpoints about traceability. Whatever is your particular viewpoint, the people behind TraceFood (see Who we are) are trying to make your life easier by providing easy-to-follow Food Traceability Practices and a standard for exchanging traceability data. You can read more on this website or on our sister website www.tracefood.org.

What is this whole traceability thing?
Traceability is about knowing where a food item is or has been at a particular moment and what has been done to it. So if you are a yoghurt producer this means being able to find out what products have been affected by a particular problem your milk supplier had and being able to pinpoint where these products are now.

I am a Vegan, can I eat TraceFood?
Well, the short answer is: no. Food is actually two things: the stuff itself and the information that’s available about it. Where it came from, how many food miles it has consumed, whether it contains gluten or was produced organically.
FoodTraceability content

- Different views on traceability
  - Consumer
  - Operational
  - Chain
  - IT
  - Quality Assurance
  - Public Authority
- Contact information
- Blog
Site structure

Your main concern is probably the performance of the process. Getting your order done on time and with minimal interruption is your goal. Traceability for you is primarily more work you think. Or perhaps you have already been able to experience that receiving standardized data together with the goods is actually making your life easier? Tell us about it!

1. Test it!
2. More information
3. Training and other material
4. What others think
5. Back to introduction

This section is aimed at those who are involved with operational matters and traceability. From an operational point of view, traceability involves registering information about what you are doing. This information can be used not only for traceability but also for...
Site structure
Site structure

FURTHER READING AND TRAINING MATERIAL

A good place to read some more about traceability initiatives from many different perspectives is the book “Food Traceability Around the World” edited by J.O. Smith and A. Fumero. The book is available on the website of the Global Food Traceability Forum.

What traceability information should I capture?

- EU standards for the farmed and caught fish industries, the so-called “TraceFish” standards. The TraceFish standards describe what information is it recommended that companies need to record in fish supply chains to achieve traceability.

Details of the TraceFish standards can be found here.
Site structure

Presentations

- Bar Coding Systems, Traceability of Fish and Fish Products: Technologies and Management Systems. By Jostein Storev and Gunnar Stennesæt. Download

Where in my business should I capture traceability information?

In order to learn more about where to capture information a company may undertake a ‘process mapping’ in order to find out where it needs to capture traceability information. The following reports could be used as inspiration:

- Product and information flow at a mineral water bottling plant
- Product and information flow at a salmon curing house
- Product and information flow at a chicken processing plant

DATA TO CAPTURE

Here is a selection of training and other original material that we find useful for this viewpoint. We apologise if you don’t find the material you are looking for. Contact us if you want to add material yourself or you would like to tell us what kind of material you would like to find here. Happy reading!

1. Test it!
2. More information
3. Training and other material
4. What others think
5. Back to introduction
Site structure

**DATA TO CAPTURE**

While it is important to express one's own interests, it is also very important to understand what other people think about the same subject. This section tries to give some hints at what other actors in the food supply chain might think about the topics that you care about. Of course you can always change the viewpoint, but this is a good place to introduce yourself to other people's thinking.

1. Test it!
2. More information
3. Training and other material
4. What others think
5. Back to introduction

**RECENT COMMENTS**

No comments

Add new comment

---

**What other people think**

**CONSUMERS**

Consumers are rarely interested in what goes on but they are interested in knowing that someone has controlled the food they are eating. They are not directly interested in operational information - but can be interested in knowing that 'someone' has controlled it. Go to viewpoint.

**SUPPLY CHAIN**

Within a supply chain it is important that the different actors have agreed what and how traceability information should be communicated. When considering operations from a supply chain perspective, it is important to have clarified what information should be internal in a company and what information can be shared through the supply chain. The supply chain will have minimum requirements for what information that will be needed for supply chain management. Importantly, every operator will be direct members of the supply chain. Go to viewpoint.

**QUALITY ASSURANCE**

People working with quality assurance will expect that traceability will enable them to acquire more information about products and process. They may not always be aware or interested in the privacy issues that this raises for the people concerned with operations. One of the main problems that needs to be managed by the food operators is the fact that a lot of information "disappears" along the production lines making it very hard or even impossible to trace through the operator. Go to viewpoint.

**PUBLIC AUTHORITY**

Public authorities will be interested in information about what happened during food processing. The most important part is that the operators follow the laws and regulations required by the authorities and that they are able to document and explain these from the delivered and developed products.
The TraceFood Wiki

Main Page

The TraceFood Wiki is open for anyone to comment and add! Built on the TraceFood Framework we still remain true to our main objectives: to make traceability through a whole supply chain possible, preferably in electronic form. The goal is to ensure that food items and processes are identified in a uniform way, that a common electronic language is available for interchange of traceability information, and that a common Good Traceability Practice underlies all implementations.

In order to achieve this, we have created the TraceFood Wiki. We provide this wiki both as a help for people that wants to implement traceability in their business, but also as an arena where people can come together and discuss their different views and experiences on traceability. Our work has laid the foundation, but to move forward we need input from all communities working with traceability. With your help, TraceFood will raise the standards of traceability in Europe and ensure a safe and sustainable food supply for the whole world.

Funding

The initial work of the framework was done in the EU projects TraceFish and SafefoodPlus funded by the European Commission under the fifth and sixth framework programmes. Currently, the TraceFood Framework and the TraceFood Wiki is being funded and developed through the EU funded project TRACEo. Several other international projects and initiatives also support the framework. Guidelines and standards have been, and are being developed for numerous food sectors, including seafood, mineral water, honey, chicken, cereal and meat.

Navigating

Here are some navigation tips for new and old users!

- Are you new to traceability, and want to know more about it? Perhaps you want to know what traceability can do for your business?
  - *Traceability* is the section to go for all your overview needs.
- Have you decided to go into traceability and are unsure if you want to use TraceFood?
  - *Fundamentals* will provide you with our underlying principles and basic definitions.
- You have decided to implement traceability, and use TraceFood? Great! But you are unsure of how it should be done?
  - *Good Traceability Practice* will provide you with experiences from the projects and case studies and examples of best practice from the industry.
- You are in the process of implementing traceability and you want to learn how to share this information with your business partners?
  - *Tools* contains information about concrete methods and electronic languages for exchange of information.

Frequently asked questions

Got answers to some of your questions at the TraceFood FAQ!
GTP – Making it interactive

- Moved from a static word document to an interactive site
- Easier to navigate
- Easier to maintain
- Up-to-date
- Improved search possibilities
- Improved feedback options
- Wiki solution powered by MediaWiki
What’s a wiki?

- A wiki is a website that uses wiki software, allowing the easy creation and editing of any number of interlinked Web pages, using a simplified markup language.
- Wikis are often used to create collaborative websites and to power community websites.
- The collaborative encyclopedia Wikipedia is one of the best-known wikis.
- Wikis are used in business to provide intranet and knowledge management systems.
- Ward Cunningham, the developer of the first wiki software, WikiWikiWeb, originally described it as "the simplest online database that could possibly work."
Characteristics of a wiki

- A wiki invites all users to edit any page or to create new pages within the wiki Web site, using only a Web browser without anything extra.
- Wiki promotes meaningful topic associations between different pages by making page link creation almost intuitively easy and showing whether an intended target page exists or not.
- A wiki is not a carefully crafted site for casual visitors. Instead, it seeks to involve the visitor in an ongoing process of creation and collaboration that constantly changes the Web site landscape.
- Wikis are generally designed with the philosophy of making it easy to correct mistakes, rather than making it difficult to make them.
Collaborative writing - benefits

- **Interchange of ideas** - collaborative writing could, in ways that can be tested empirically, produce better work and teach people quantitatively more than in situations where the same individuals write alone. Each aspect of the writing process—including invention, writing, and editing—are inherently social acts that benefit from and thrive in a collaborative environment.

- **Flexibility and freedom** - As computer technology appears poised to redefine literary production again, the technology itself is no longer “hardware” like printing presses and movable type but computer source code. As such, our ability to manipulate the terms on which we can communicate and collaborate, as long as we have access to source code, is instantaneously and almost infinitely flexible. We can add a line here, subtract a line here, change a line here and we create a different system and a different environment to shape and control the creation, distribution, or manipulation of literature.

- **Fostering of discussion and debate** - open collaborator’s eyes to how their work compares to that of their peers, giving them a better sense of their own strengths and weaknesses as writers and thinkers.

- **Encourage authors to consider their audience** - an important aspect of learning to write effectively and yet a component missing in many traditional approaches.
Easy editing

Editing Fundamentals: Privacy vs transparency

== Transparency, privacy, and granularity ==

A basic non-functional issue to be considered is the principle of transparency with respect to traceability. Improved transparency is a key-point for improving traceability with respect to food safety issues as well as quality and origin documentation.

The basic one-down and one-up requirement with respect to traceability of products will mostly expose who are trading with who and to a certain degree which products have been sent and received on a certain granularity level. Documentation of which transformations that have been done inside an actor is thus not exposed, i.e., the documentation of which ingredients and resources that have been used as input to produce an outgoing unit is not visible from the outside. An improvement of [[Fundamentals: Internal traceability definition|Internal traceability]] can leverage the transparency even though such information is not made visible outside. Selection of which documentation and information to expose about the internal processes is thus an important issue to consider when participating in [[Fundamentals: Chain traceability definition|chain traceability]] systems.

A too fine-grained exposure of the internal [[Fundamentals: Traceability graph|traceability graph]] showing all internal transformations can be considered as harmful with respect to visibility of recipes and internal production processes. Similarly can a too fine-grained exposure of received and sent [[Fundamentals: Traceable unit definition|traceable units]] show trading relationships and actual sale. This can be considered harmful with respect to trade negotiations and changes in market, thus influencing stock prices and the value of the company.

A too coarse-grained exposure of internal traceability can on the other hand mean less opportunities for improvement of marketing, logistics, and customer relations.
I think it may be time to move over to the Wiki from the yahoo-group. Thus, make the documentation and examples directly available in the tracefood.org web-site.
Security principle: soft security
Controlling changes

Main Page

Revision as of 11:23, 2 July 2008 (edit)
Ebjemson (Talk | contribs | block)
← Previous diff

Carlfis (Talk | contribs | block) [undo]

(One intermediate revision not shown.)

And so it begins! The TraceFood Wiki is finally live and open for anyone to comment and edit!

Builtin on the TraceFood Framework we still remain true to our main objective: to make [[Fundamental Traceability definition|traceability]] through a whole supply chain possible, preferably in electronic form. The goal is to ensure that food items and processes are identified in a uniform way, that a common electronic language is available for interchange of traceability information, and that a common [[CerFIP|Food Traceability Practice]] underlie all implementations.

In order to achieve this, we have created the TraceFood Wiki. We provide this wiki both as a help for people wanting to implement traceability in their business, but also as an arena where people can come together and discuss their different views and experiences on traceability. Our work so far has laid the foundation, but in order to move forward we need input from all communities working within traceability. With your help, TraceFood will grow to the international standard we hope it will one day become, and contain the worlds leading best practices on food traceability!
Wiki Content

- Fundamentals
  - Basic principles
  - Definitions
- Good Traceability Practice
  - Generic
    - Internal
    - Chain
  - Sector specific
- Tools
  - Electronic languages
  - Standardized analytical methods
- Traceability projects
  - National
  - International
  - Sector specific
- Traceability references
Good traceability practice

GTP

Contents

1 Recommendations for Good Traceability Practice in the food industry
   1.1 Generic GTP
   1.2 Sector Specific GTP's
   1.3 Relevant references for GTP

Recommendations for Good Traceability Practice in the food industry

This section will present the recommendations for good traceability practice in the industry. The practices are a result from input and knowledge gained from many research projects, industrial projects, and other national and international projects and practices.

Generic GTP

- Guide to implementing internal traceability
- Guide to implementing chain traceability
- Guide to adapting electronic exchange of traceability information

Sector Specific GTP’s

- Implementing traceability in the seafood sector.
- Implementing traceability in the mineral water sector.
- Implementing traceability in the honey sector.
- Implementing traceability in the chicken sector.
Sector specific GTP

GTP: Mineral Water Sector

Contents
- Introduction
- Defining traceable units
- Good Practice
- Sector specific information

Introduction

This page is meant to be a practical guideline for food businesses in the mineral water industry preparing themselves for implementation of traceability oriented practice in their own company. Recommendations given are based on principles and requirements set in the TraceFood standards.

Defining traceable units

First step in implementing traceability is to define your traceable units. A traceable unit often refers to the smallest traceable unit that is exchanged between two parties in the supply chain and may be a bottle, a six pack of bottles, a carton of six packs or a pallet with six packs or cartons.

Traceable units should be defined for inbound materials and finished products.

Diagram:

- Bottle
- Six pack
- Carton
- Define your inbound trade units
- Define your outbound trade units
# Sector specific ad-hoc standards

**Mineral water producer**

For the purposes of this document, mineral water producers are considered to be businesses that produce plastic and/or glass bottles of mineral water. The water comes from a natural source of the underground that contains at least 250 parts per million total dissolved solids. The mineral water producers create new trade units and do not add minerals and trace elements to the bottles of mineral water.

<table>
<thead>
<tr>
<th>Data element</th>
<th>Description</th>
<th>Examples</th>
<th>Categorisation</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>MINERAL WATER PRODUCER</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>MVMP1</td>
<td>Mineral water producer ID</td>
<td>Name and address or GUN of mineral water producer that operates processing establishment</td>
<td>The Mineral Water Co, 13 Mineral Water Street, Manchester, MA14 2LP, England or n3-m13</td>
</tr>
<tr>
<td>MVMP2</td>
<td>Mineral water producer establishment ID</td>
<td>Name, address and registration number or GUN of processing establishment</td>
<td>The Mineral Water Co, 13 Mineral Water Street, Manchester, MA14 2LP, England or n3-m13</td>
</tr>
<tr>
<td>MVMP3</td>
<td>GMP certification</td>
<td>Names of quality or food safety GMP schemes by which mineral water producer is certified</td>
<td></td>
</tr>
<tr>
<td>MVMP4</td>
<td>Laboratory certification</td>
<td>Names of laboratory certification</td>
<td></td>
</tr>
</tbody>
</table>

**FOR WATER RECEIVED**

<table>
<thead>
<tr>
<th>Source</th>
<th>MVMP5</th>
<th>Source ID</th>
<th>Name of the source / place</th>
<th>x</th>
</tr>
</thead>
<tbody>
<tr>
<td>MVMP6</td>
<td>Date and time of reception</td>
<td>Date and time of transfer from source</td>
<td>2005-06-28T08:30</td>
<td>x</td>
</tr>
</tbody>
</table>

**Control checks (related to the date and time of reception)**

| MVMP7 | Further quality control checks | Records of further quality control checks, each in the form of description of measurement and value, are available in electronic form, on paper or not available | Paper | x |
## Analytical methods

### Method number C5

<table>
<thead>
<tr>
<th>Method of analysis</th>
<th>Texture analyzer (Warner-Bratzler shear apparatus)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Category of method of analysis</td>
<td></td>
</tr>
<tr>
<td>Parameter group</td>
<td>Organoleptical</td>
</tr>
<tr>
<td>Parameter</td>
<td>Texture</td>
</tr>
<tr>
<td>Legislative value</td>
<td></td>
</tr>
<tr>
<td>Monitoring</td>
<td></td>
</tr>
<tr>
<td>Chemical Abstract Service</td>
<td></td>
</tr>
<tr>
<td>Cross reference</td>
<td></td>
</tr>
</tbody>
</table>

### Method number C6

<table>
<thead>
<tr>
<th>Method of analysis</th>
<th>Isolation of hemagglutinating virus</th>
</tr>
</thead>
<tbody>
<tr>
<td>Category of method of analysis</td>
<td></td>
</tr>
<tr>
<td>Parameter group</td>
<td>Diseases</td>
</tr>
<tr>
<td>Parameter</td>
<td>Newcastle Disease (ND)</td>
</tr>
<tr>
<td>Legislative value</td>
<td></td>
</tr>
<tr>
<td>Monitoring</td>
<td></td>
</tr>
<tr>
<td>Literature reference</td>
<td>The Merck Veterinary Manual</td>
</tr>
<tr>
<td>Chemical Abstract Service</td>
<td></td>
</tr>
<tr>
<td>Cross reference</td>
<td></td>
</tr>
</tbody>
</table>

### Method number C7

<table>
<thead>
<tr>
<th>Method of analysis</th>
<th>Microscopically diagnosis of oocysts</th>
</tr>
</thead>
<tbody>
<tr>
<td>Category of method of analysis</td>
<td></td>
</tr>
<tr>
<td>Parameter group</td>
<td></td>
</tr>
<tr>
<td>Parameter</td>
<td></td>
</tr>
<tr>
<td>Legislative value</td>
<td></td>
</tr>
<tr>
<td>Monitoring</td>
<td></td>
</tr>
<tr>
<td>Literature reference</td>
<td></td>
</tr>
<tr>
<td>Chemical Abstract Service</td>
<td></td>
</tr>
<tr>
<td>Cross reference</td>
<td></td>
</tr>
</tbody>
</table>
Electronic traceability languages

Tools: TraceCore XML Overview

TraceCore XML (TCX) is an XML format for the capture and exchange of traceability information between parties in a supply chain. It is being developed in Work Package 4 as part of the EU project "TraceCore" lasting from 2005 through 2009. The main organizations contributing to the specification are

- MantaTech
- FoodReg
- TraceTracker

The purpose of TCX is to define a format where all the minimum elements (hence the "Core" in the name) needed to model traceability relations between organizations in a supply chain are included. Only some basic properties are included in the core, while extension mechanisms are meant to provide ways to include industry specific properties, properties exchanged between specific parties etc.

Contents

1 Status and Future
2 Early adopters of TraceCore XML
3 New documentation related to EPCIS alignment
   3.1 External links
4 The Abstract Model
5 Meetings and Minutes

Status and Future

The current revision of the format is Revision 2, Release Candidate 2. XML Schema files, documentation and supplementary files are for now available in the Files section on the Yahoo group

- TraceCore

The material will eventually be moved into this wiki later.

TCX adoption has had limited success so far, and user experiences from early adopters are not overly positive. The group behind TCX has therefore discussed how TCX could get more momentum in the industry in the future. After the Trace project ends in December 2009 there are no more funds to further develop, support and maintain the format. It is therefore important to try to identify commercially driven processes that can support the further development of the format. As opposed to R&D driven or pure academic driven projects, a commercially driven process will also guarantee a minimum level of users and activity.

With this perspective, the group started such discussions during and just after the Trace annual meeting in Torremolinos in April 2008. A key goal was to identify existing communities and/or frameworks with solid momentum in the supply chain and check ways to "join" and bring TCX into one such community. The most important communities and frameworks identified were:
Overview of traceability projects

Introduction
This page will present international traceability projects which may provide relevant experiences and information related to traceability. The page will be organized by project and will where appropriate, only have a reference to Web pages where the project will be presented more thoroughly.

TRACE
- Project:
- EU TraceFish®

SEAFoodplus
A better life with seafood.
- Overall objective: To reduce health problems and to increase well-being among European consumers by applying the benefits obtained through consumption of healthy, promoting and safe seafood products of high eating quality.

SAFEFOODERA
Vision is to build a staircase to European excellence in food safety research programming through trust and mutual understanding.

Projects
This section will provide short information to projects carried out within the SAFEFOODERA umbrella:
- eTrace
Extensive litterature lists

GTP: Literature

Contents
1 General traceability
2 Chain traceability
   2.1 Technology
   2.2 Management
   2.3 Regulations
2.4 General
3 Logistics
4 Law
5 Sensor and sensor networks
6 RFID

General traceability

Conclusions

- Foodtraceability site up and running
- First draft of wiki version launched.
- More content are continuously added to the wiki
- We aim to provide a hub for cooperation between both countries and businesses
- Looking forward to see active participation in discussion pages

- Visit us at:
  - http://www.tracefood.org
  - http://www.foodtraceability.eu