**Minutes of the 1st Management Committee Meeting of the COST Action**

CA19145 – European Network for assuring food integrity using non-destructive spectral sensors (SensorFINT)

*Online ZOOM meeting*

*Day 1: 30/09/2020*

*Day 2: 01/10/2020*

[1) Agenda and Materials 2](#_Toc54612462)

[2) Participants and Hosting Team 2](#_Toc54612463)

[3) Relevant Information to the Management Committee 2](#_Toc54612464)

[4) COST Action Café and debriefing 2](#_Toc54612465)

[5) Pre-requisites for the Decision Making 3](#_Toc54612466)

[6) Decisions by the Management Committee 3](#_Toc54612467)

[a. Election of the Chair and Vice-chair 3](#_Toc54612468)

[b. Selection of the Grant Holder (Scientific Representative) and agreement of FSAC 3](#_Toc54612469)

[c. Establishment of Action Management Structure 3](#_Toc54612470)

[7) Further discussions and decisions 4](#_Toc54612471)

[8) Next meeting and Closing 5](#_Toc54612472)

[9) List of Annexes 5](#_Toc54612473)

|  |
| --- |
| ACTION Status* Action parties: 26 COST countries
* CSO approval: 24/03/2020
* Start date: 30/09/2020
 |

# Agenda and Materials

The agenda is in Annex 1. The meeting was organised following a participatory methodology. The material presented by the hosting team and produced by the participants during the two half days (referred to as Day 1 and Day 2) is available in the dedicated Sharepoint Action folder: **[MC1](https://costassociation.sharepoint.com/sites/Projects/MC1/Shared%20Documents/Forms/AllItems.aspx?viewid=6cf8940e-25ec-4de9-8793-675ed6f8e017&id=%2Fsites%2FProjects%2FMC1%2FShared%20Documents%2FCA19145" \t "_blank)**

# Participants and Hosting Team

Gordana Kregar (Science Officer assigned for this Action) and Tania Gonzales Ovin (Administrative Officer assigned to this Action) supported by Monica Perez Cabero and Jeannette Nchung Oru and hosted the meeting. Further colleagues from the COST Association supported the hosting team in the COST Action Café; Karima BenSalah and Judith Litjens (Communication and Policy Officers). The Main Proposer Dolores Perez-Marin presented the COST Action to the MC. The Action Chair Dolores Perez-Marin moderated the meeting following the election.

The hosting team welcomed the participants (list in Annex 2). The participants were introduced to COST and the COST Action and actively participated to attain the objectives of the MC1 which are:

* Take ownership of the Action challenge
* Networking and community building
* Bring everyone to the same level of knowledge on COST
* Develop Action structure, methodology and planning

# **Relevant Information to the Management Committee**

In preparation to the MC1 meeting, the hosting team provided the MC with:

* Media recordings covering COST: Welcome by the director, COST framework, managing and growing your network, communicating about your Action, Preparing the Work and Budget Plan, Implementing the COST networking tools
* Documents on how to manage COST Actions: Summary info and Practical guide
* Templates for Working Group and topic discussions
* Selection of online tutorials for ZOOM meeting participation

At the meeting, the hosting team provided the opportunity for MC members to formulate their questions on the COST framework.

After the meeting, the hosting team uploaded the slides presented at the MC1 meeting including the presentation of the Action by the Main Proposer and the group photo.

Participants who didn’t want to appear on the group photo were requested to switch off their camera.

# COST Action Café and debriefing

For three rounds of the discussion, the participants were invited to join online breakout rooms organised by Working Group topics and Horizontal topics listed here after:

WG1: Non-destructive Spectroscopic Sensors (NDSS)
WG2: Sensor fusion
WG3: Modelling
WG4: ICT

WG5: Dissemination & Exploitation (w/ COST Comms)

DT1: Managing & Growing the network (w/ COST Policy)

DT2: Managing requests to join the Working Groups

DT3: Decide who to invite and reimburse for Action meetings

DT4: Grant awarding – STSMs and ITC CGs

In each breakout room, a volunteer from the MC was appointed as rapporteur. The hosting team supported the discussions. The outcomes of the discussions are summarized and attached under Annex 3. The Management Committee will develop further the ideas by the MC2 and in the upcoming months.

# Pre-requisites for the Decision Making

During Day 2, the participants acknowledged and agreed to comply with the Rules of Procedure for the Management Committee were presented and read by the meeting participants from Annex I *COST Action Management, Monitoring and Final Assessment (COST 134/14:* [*http://www.cost.eu/action\_management*](http://www.cost.eu/action_management)*).*

Before any decision was taken, Tania verified that the minimum of 2/3 of the parties present (23/26), the necessary quorum was achieved allowing the Management Committee meeting to officially take place in accordance with Article 9 of the Rules of Procedure for the Management Committee (see [*http://www.cost.eu/action\_management*](http://www.cost.eu/action_management)*).*

# Decisions by the Management Committee

## Election of the Chair and Vice-chair

**Decision 1:** Dolores Perez-Marin (ES) was elected Chair

**Decision 2:** Tom Fearn (UK) was elected Vice Chair

## Selection of the Grant Holder (Scientific Representative) and agreement of FSAC

**Decision 3:** The MC selected University of Cordoba as Grant Holder Institution, represented at the MC by the elected Chair. Upon request of the Grant Holder Scientific Representative, the MC agreed to award the maximum FSAC rate of 15% of the total Scientific Expenditure.

## Establishment of Action Management Structure

**Decision 4:** The following MC members were elected to the following leadership positions:

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| ***Position*** | ***Name*** | ***Country*** | ***Gender*** | ***ECI*** |
| Chair | Dolores Pérez-Marín | Spain | F | no |
| Vice-chair | Tom Fearn | UK | M | no |
| WG1 Leader | Szilveszter Gergely | Hungary | M | no |
| WG1 Co-Leader | Ana Garrido Varo | Spain | F | no |
| WG2 Leader | Antonio Silva Ferreira | Portugal | M | yes |
| WG2 Co-Leader | Aoife Gowen | Ireland | F | yes |
| WG3 Leader | Marina Cocchi | Italy | F | no |
| WG3 Co-Leader | Jean-Michel Roger | France | M | no |
| WG4 Leader | Ivan Stajduhar | Croatia | M | no |
| WG4 Co-Leader | Declan Delaney | Ireland | M | yes |
| WG5 Leader  | Christian Huck | Austria | M | no |
| WG5 Co-Leader + ITC Conference Grant Coordinator | Anna Sandak | Slovenia | F | no |
| Training&Education Coordinator + Science Communication Manager | Vincent Baeten | Belgium | M | no |
| Training& Education co-Coordinator | Maria TARAPOULOUZI | Cyprus | F | yes |
| STSM Coordinator | Paul Brereton | UK | M | no |

**Decision 5:**

A core group was established, composed by all the members listed in the previous table (WG co-leaders as substitutes).

A Training & Education team was established, composed by the Chair, the Vice-chair, the coordinator and co-coodinator of Training&Eduvcation and the STSM coordinator.

**Decision 6:**

List of mandates approved:

* STSM (Callls and criteria for selection): Core Group
* ITC Conference Grants: Core Group
* Training Schools (final program and reimbursements): Training & Education Team
* Conferences/Worshops (final program and reimbursements): Chair, Vice-chair and the local organizer.
* Budget reallocation (not higher than 15,000 €): Core Group.

# Further discussions and decisions

**Decision 7:** It agreed the below tentative Work and Budget Plan for the first period (until April 30th 2021).

|  |  |
| --- | --- |
| **A) COST NETWORKING TOOLS** |  |
|  Design of the Action logo.  | 1000 |
|  Website creation and social media. | 3100 |
| Virtual Core Group Meeting (First week of November and Middle of Jannuary)  | 0 |
|  Virtual WGs meetings (End of November) | 0 |
|  Short-term scientific mission (4) | 8000 |
|  Virtual training school (February)  | 2000 |
|  Workshop (1,5 days) for March 2021  | 5000 |
|  MC meeting March 2021 (face to face) | 23500 |
|  OERSA (Other scientific expenses related to scientific activities) | 500 |
| **B) TOTAL SCIENCE EXPENDITURE**  | 42600 |
| **C) FSAC (15% of 49000)** | 6390 |
| **TOTAL GRANT (B+C)** | 48990 |

**Discussion:** It was discussed the type of workshop, deciding initially a face to face event, and delaying the final decision to January, as a function of the Covid situation.

It was agreed to set a virtual Core Group meeting during November.

# Next meeting and Closing

The MC agreed to meet presumably in the period March to April 2021 for a joint MC+WG meeting. The place is not still decided. There are two nominations (Cyprus and Portugal) and it will be decided during the Core Group meeting in November 2020.

The hosting team gave some final words about the COST Action. The participants expressed their individual follow up actions for the success of the Action.

The Chair thanked all the members for their support and commitent, and also highlighted the desire to advance the knowledge of NDSS and in its transfer during the life of the Action. Finally, she hoped that the health situation would improved, and in that case the development and achievements of the SENSORFINT Action could be carried out as scheduled.

# List of Annexes

* Annex 1 - Agenda
* Annex 2 - List of participants
* Annex 3 – Discussion summary

**Minutes prepared by:**

* *Action Science Officer*
* *Action Chair*
* *Action Vice Chair*

Annex 1- Agenda

**Day 1 - 14:00 - 17:30 CET**

1. Welcome and Introduction
2. Getting to know each other
3. How to Manage a COST Action – short recap and Q&A
4. Presentation of the Action by the Main Proposer & Discussion

Group Photo & Break

1. COST Action Café (parallel discussion sessions)
2. First day closing and set the scene for Day 2

**Day 2 - 9:30 - 13:00 CET**

1. Welcome
2. Recap from Day 1
3. Debriefing from the COST Action Café of Day 1

Break

1. MC Decisions –
	1. Election of the Chair and Vice Chair
	2. Action Structure and other Leadership Roles
2. Planning for management procedures and upcoming activities
3. Closing of the meeting

Annex 2- List of participants

Day 1:

|  |  |
| --- | --- |
| **Name (Original Name)** | **User Email** |
| Andreas Niemöller | andreas.niemoeller@bruker.com |
| Antonio Ferreira | asferreira@porto.ucp.pt |
| Aoife Gowen | aoife.gowen@ucd.ie |
| Belous Madalina | madalina.belous@spiruharet.ro |
| Benoît JAILLAIS | benoit.jaillais@inrae.fr |
| BG Stefka Atanassova | atanassova@uni-sz.bg |
| Carsten Fauhl-Hassek | carsten.fauhl-hassek@bfr.bund.de |
| Christian Huck | christian.w.huck@uibk.ac.at |
| Cristina Máguas | cmhanson@fc.ul.pt |
| CY Maria Tarapoulouzi | tarapoulouzi.maria@ucy.ac.cy |
| Declan Delaney | declan.delaney@ucd.ie |
| DK Søren Engelsen & Klavs Sørensen | se@food.ku.dk |
| Gordana Kregar | gordana.kregar@cost.eu |
| HU Szilveszter Gergely | gergely.szilveszter@edu.bme.hu |
| Ivan Stajduhar | istajduh@riteh.hr |
| Jasenka Gajdoš Kljusurić | jgajdos@pbf.hr |
| Jens Petter Wold | jens.petter.wold@nofima.no |
| Kristian Pastor | pastor@tf.uns.ac.rs |
| Liudmil Antonov | lantonov@orgchm.bas.bg |
| LOLA PEREZ-MARIN | dcperez@uco.es |
| Marina Cocchi | marina.cocchi@unimore.it |
| Matija Milanic | matija.milanic@fmf.uni-lj.si |
| Mecit Oztop | mecit@metu.edu.tr |
| Mihai Brebu | bmihai@icmpp.ro |
| MK - DIJANA BLAZHEKOVIKJ - DIMOVSKA | dijanablazekovic@yahoo.com |
| MT Vasilis Valdramidis | vasilis.valdramidis@um.edu.mt |
| Nataliia Sivchenko | nataly@doscon.no |
| PL Henryk Czarnik-Matusewicz | henryk.czarnik-matusewicz@umed.wroc.pl |
| PL Krzysztof Rutkowski | krzysztof.rutkowski@inhort.pl |
| Radu Ionescu | septimiuradu.ionescu@emu.ee |
| Saskia Van Ruth | saskia.vanruth@wur.nl |
| Science Administration | science.administration@cost.eu |
| SE\_Martin Lagerholm | martin.lagerholm@outlook.com |
| SE\_Stefan Lundgren | stefan.lundgren@perkinelmer.com |
| SI Anna Sandak | anna.sandak@innorenew.eu |
| Stevan Stankovski | stevan@uns.ac.rs |
| Tânia Cova | tfirmino@qui.uc.pt |
| UK Paul Brereton | paul.brereton@qub.ac.uk |
| UK Tom Fearn | t.fearn@ucl.ac.uk |
| Víctor M. Fernández Cabanás | victorf@us.es |
| Vincent Baeten | v.baeten@cra.wallonie.be |
| Wouter Saeys | wouter.saeys@kuleuven.be |
| ZZ - Jeannette Nchung Oru | tania.gonzalezovin@cost.eu |
| ZZ - Judith Litjens  | judith.litjens@cost.eu |
| ZZ - Karima BenSalah | karima.bensalah@cost.eu |
| ZZ - Mónica Pérez-Cabero | monica.perez@cost.eu |

Day 2:

|  |  |
| --- | --- |
| **Name (Original Name)** | **User Email** |
| Anders Larsen | al@q-interline.com |
| BE Vincent Baeten  | v.baeten@cra.wallonie.be |
| BE\_Wouter Saeys | wouter.saeys@kuleuven.be |
| Benoît JAILLAIS | benoit.jaillais@inrae.fr |
| Berzaghi Paolo | paolo.berzaghi@unipd.it |
| Christian Huck | christian.w.huck@uibk.ac.at |
| Cristina Máguas | cmhanson@fc.ul.pt |
| DIJANA BLAZHEKOVIKJ - DIMOVSKA | dijanablazekovic@yahoo.com |
| ES\_LOLA PEREZ-MARIN | dcperez@uco.es |
| ES\_Víctor M. Fernández Cabanás | victorf@us.es |
| HR Ivan Štajduhar | istajduh@riteh.hr |
| IE Aoife Gowen | paul.brereton@qub.ac.uk |
| IE Declan Delaney | declan.delaney@ucd.ie |
| IT MARINA COCCHI | marina.cocchi@unimore.it |
| Jasenka Gajdoš Kljusurić | jgajdos@pbf.hr |
| Jean-Michel Roger | jean-michel.roger@inrae.fr |
| Klavs Sørensen | kms@food.ku.dk |
| Liudmil Antonov | lantonov@orgchm.bas.bg |
| maria tarapoulouzi | tarapoulouzi.maria@ucy.ac.cy |
| Martin Lagerholm | martin.lagerholm@outlook.com |
| Matija Milanic | matija.milanic@fmf.uni-lj.si |
| Mecit Oztop | mecit@metu.edu.tr |
| Mihai Brebu | bmihai@icmpp.ro |
| NO Jens Petter Wold | jens.petter.wold@nofima.no |
| NO\_Nataliia Sivchenko | nataly@doscon.no |
| PL Henryk Czarnik-Matusewicz | henryk.czarnik-matusewicz@umed.wroc.pl |
| PL Krzysztof Rutkowski | krzysztof.rutkowski@inhort.pl |
| PT Antonio Ferreira | asferreira@porto.ucp.pt |
| Radu Ionescu | septimiuradu.ionescu@emu.ee |
| RO\_ Madalina Belous | madalina.belous@spiruharet.ro |
| RS Kristian Pastor  | pastor@tf.uns.ac.rs |
| Saskia Van Ruth | saskia.vanruth@wur.nl |
| SI Anna Sandak | anna.sandak@innorenew.eu |
| Søren Engelsen | se@food.ku.dk |
| Stefan Lundgren | stefan.lundgren@perkinelmer.com |
| Stefka Atanassova | atanassova@uni-sz.bg |
| Stevan Stankovski | stevan@uns.ac.rs |
| Szilveszter Gergely | gergely.szilveszter@edu.bme.hu |
| Tânia Firmino Cova | tfirmino@qui.uc.pt |
| Tania González Ovin | tania.gonzalezovin@cost.eu |
| UK Tom Fearn | t.fearn@ucl.ac.uk |
| ZZ Mónica Pérez-Cabero | monica.perez@cost.eu |
| ZZ\_Gordana Kregar | gordana.kregar@cost.eu |

Annex 3- DISCUSSION SUMMARY

Moments of the 1st day (**WG1 discussion** at MC1 meeting - CA19145 COST) [30.09.2020]

Blue colour: my questions or reflections. Red colour: key words.

**1ST (20-MINUTE-) ROUND / FROM 16:07**

***Dr Szilveszter GERGELY (HU)***

* *Short introduction. (See the attached “Who we are (NIR Group of BME).ppt” file, please.)*

***Prof Søren BALLING ENGELSEN & Mr Anders LARSEN (DK)***

* Teaching, i.e. Copenhagen University: quality control, quantitative analysis, fluorescence, Raman, NIR. MIR: ATR FT-IR for liquids (e.g. milk, wine, oil (olive, sunflower, corn germ etc.)),: foodomics (~ metabolomics) as new topic, and chemometrics of course. Very important to show the potential of MVDA techniques for students – more and more people are recognizing the need to analyze the data collected in so-called data lakes. “Python is the new English”.
* Main segment of DK: “Milky Way”. Is it any experience to measure the by-products of foods? E.g. grains: there are global calibrations, but what’s about the (non-food) by-products? More dedicated solutions in this field.
* Processing low quality data. Similar like standardisation, i.e. two school: producing good instruments and so not necessary serious support by software vs. not so good (e.g. old) instruments but excellent software help.
* PAT & QbD transfer from pharma to food? Starting in 2002, but… Maybe common sense is enough… (If we are already in the pharmaceutical industry.) Parallels: fermentation in both the pharmaceutical and food industries. Pharma experience: NIR reflects the changes of living system while glucose (as analyte) concentration measured by Raman with much more accurate, than NIR. It should be interesting measure the same system with two different sensor at the same time.

***Dr Martin LAGERHOLM (SE)***

* Many practical work with instruments and calibrations: not only off-line, at-line, but also in-line, on-line. Connecting to teaching. To show real experiences from the “battlefield” (not only successes, but also mistakes, pitfalls) is always very important: the sun does not shine every day over the NIR guys. Teaching in-/on-line methods not so easy, because pilot-scale in the universities is not a standard (expensive, dedicated but diverse).
* What is the bottleneck of in-line, on-line techniques? E.g. sensors?

***Dr Stefka ATANASSOVA (BG)***

* Mostly NIR user.

***Dr Jens Petter WOLD (NO)***

* Many techniques are used. E.g. Practice in fatty acid measurement. Teaching.

*[switching over]*

***Additional presents:*** *Prof Paolo BERZAGHI (IT), Prof Liudmil ANTONOV (BG), Dr Víctor M. FERNÁNDEZ-CABANÁS (ES), Dr Henryk CZARNIK-MATUSEWICZ (PL), Dr Krzysztof RUTKOWSKI (PL)*

**2ND (15-MINUTE-) ROUND / FROM 16:26**

***Dr Andreas NIEMÖLLER (DE)***

Is it any Raman usage in the field of food industry by Bruker? He is a NIR specialist, so his colleagues need to be asked. The main problem with Raman the small measuring area. And the price of instruments.

***Prof Matija MILANIČ (SI)***

Hyperspectral imaging (HSI), MIR etc. Measured systems: biological samples, end-products, e.g. bread. Measuring physical parameters, too. Air bubbles in the bread, marbling of slices of steak in meat – connection between texture and sensory data. The wide world of NIR/MIR/Raman imaging: pharma – false tablet, medical approach – label free detection of tumour, environmental analysis – micropolymers. The last one: micropolymers in food raw materials (e.g. from fresh water into fish).

***Dr Tânia TÂNIA F. G. G. COVA (PT)***

*[switching over]*

***Additional presents:*** *Mr Stefan LUNDGREN (SE), Dr Belous MADALINA (RO)*

**3RD (10-MINUTE-) ROUND / FROM 16:40**

***Dr Belous MADALINA (RO)***

* Food scientist – checking the microbiological status, too. Good example: *Fusarium* species on wheat, but the red colour is not enough: sometimes there is no close correlation between the concentration of fusarium and toxins. (Maybe: measure the same system with different sensors.)

***Prof Dolores PEREZ-MARIN (ES)***

* We should focusing on in-line, on-line sensors.

***DK / Anders Larsen***

* Great experience in Industrial application of NIR. One of the main problem (still) is sampling: 1) heterogenic samples, 2) too small window for sample measurement in case of handheld instruments. 3) homogeneity problems between (and within) shifts e.g. during milling: multi-sensor solution: process monitoring Vis image + NIR spectra.

*[switching over]*

***Additional presents:*** *Dr Andreas NIEMÖLLER (DE), Prof Cristina MÁGUAS (PT), Dr Kristian PASTOR (RS)*

|  |  |
| --- | --- |
| COST Action: SensorFINT | WG Number: 2 |
| Discussion Coordinator (s):Aoife Gowen (Rappateur) |
| Meeting Participants interested in the WG: *add name (country)*In attendance:Aoife (IE)Dijana (MK)Saskia (NL)Madalina (RO)Vasilis (MT)Paolo(IT)Benoit(FR)Kryzyztof (PL)Tania Stefka (BG)Matija (SI)Mihai (RO) |
| **4 YEAR PLANNING: MoU Tasks and Deliverables - Brainstorming and Main Insights***Check the description of the WG in the MoU. Discuss with your colleagues what needs to be done and how. Summarise for future reference.*WG2: Innovation related to the integration of several **NDSS signals** for **critical issues** in food integrity.Tasks2.1. Traininig school 1 (NDSS combination for solving critical issues in the food chain).2.2. Workshop year 3.2.3. WG2 Research on the state of the art and specific developments.2 Protocol and guidelines for recommendations on NDSS combination for in situ nalysis of food products. 2nd semester year 32 Prospective report on new emerging and innovative technologies for quality and process control in the agro-food industry I.2nd semester year 12 Prospective report on new emerging and innovative technologies for quality and process control in the agro-food industry II.1st semester year 4???**What needs to be done*** Define more carefully the scope of the WG – what sensors (e.g. NIR, imaging, MIR, biochem characterisation, mass spec, NMR, Raman, portable instruments – benchtop?, Xray CT, gas sensors (CO2, O2, volatiles), electronic nose, sound, GC-MS…) ? Limit to NDSS?
* Group sensors according to complementarities, differences, and compile a list of what they can measure and limit of detection, suggestions on which stages in the farm to fork they could be deployed, to form basis for guidelines deliverable
* What about data formats & data fusion – is this in scope? Would defining a metadata/data format standard be useful? how do we link with WG3 & WG4?
* Define the Critical Issues in food integrity to be addressed – strong need to link with Industry – how does this fit with the broader context of the action?

Suggested challenges: prevention of waste, early detection of quality issues, data transfer from different instruments, data management* Plan the training School – who to invite to teach (some suggestions were made)? What audience (researchers – academia &/industry?) When? & How? (hybrid?) & Duration? – should we consider separate training for industry?
* Organise a means of communication between the WG members, e.g. mailing list?
 |
| **Next Steps & Grant Period Planning: next 12 - 18 months**

|  |  |
| --- | --- |
| **Goals for the period**  | **Networking tool(s) that you would like to use\*** |
| 1. Define scope more clearly
 | WG meetings |
| 1. Engage industry to define critical issues
 | ? please suggest |
| 1. Gather information from WG on sensor capibilities
 | WG meetings/google drive? |
| 1. Plan training School
 | WG meetings/email |
| 5. |  |
| 6. |  |
| 7.  |  |
| 8.  |  |
| ….*Add as many rows as necessary* |  |

\* WG meeting(s) and/or Workshop/Conference and/or STSMs and/or Training Schools and/or ITC Conference Grants and/or Dissemination  |

|  |  |
| --- | --- |
| COST Action: | WG Number: 3 Novel Mathematical Modelling for processing NDSS in real time |
| Discussion Coordinator (s):  |
| Meeting Participants interested in the WG: (I could not write down all the names of attendees)Carsten Fauhl-Hassek DE; Andreas Niemoller DE; Soren Engelsen DK; Victoe Fernandez-Cabanas ES; Anders Larsen DK; Paolo Berzaghi IT; Nataliia Sivchenko NO; Martin Lagerholm SE; Stefan Lundgren SE; Matija Milanic SI.  |
| **4 YEAR PLANNING: MoU Tasks and Deliverables - Brainstorming and Main Insights***Check the description of the WG in the MoU. Discuss with your colleagues what needs to be done and how. Summarise for future reference.*WG3 is mainly linked to Objective 5 of MoU as well as 6-7.There are four main outputs expected from WG3 (MoU pages 13 , box WG3) in the discussion we agree that these can also individuate four main sub-tasks in which to split the WG activities and a fifth task concerning validation has also been included, so:Sub-task 1: Sampling strategies aiming at establishing sampling guidelinestopics to investigate: need of standard/reference samples for authenticity; optimal/minimal number of samples with respect to analysis task (e.g. geographic origin, adulteration,…); facing heterogeneity, etc.Sub-task 2: Fusion of hyperspectral-NIR and other spectroscopic data (of diverse sensors in general)This require strong integration with WG2. Topics where not much discussed, we foresee all levels of data fusion methodologies, multi-block and multi-set methods as well as methodologies from machine learning (ML) and ICT communities.Sub-task 3: In-process NDSS real-time analysis (food industry, big/SME)topics to investigate: influence of time scale (consider different scenarios); levels at which computation/model implementation take place at the sensor; locally at the factory; on the cloud. Evaluate complementarity of the levels;on the fly methodologies; local/fuzzy modelling approaches; integration of chemometrics and deep learning (DL); etc. Sub-task 4: Cloning instrument, model calibration transferTopics where not much discussed we can foresee here also the local and cloud levels, integration with ML and DLSub-task 5: Validation aiming at establishing validation guidelinesThis is considered extremely important, so also if encompass all other tasks deserve a specific activity. Especially training on the topic.We discuss opportunities to define sub-groups of participants for each sub-tasks and a reference person.Concerning the specific tasks for WG3 in MoU:Workshop Year 2: possible period Jun 2022Training School Year 3: possible period May-June 2023 |
| **Next Steps & Grant Period Planning: next 12 - 18 months**

|  |  |
| --- | --- |
| **Goals for the period**  | **Networking tool(s) that you would like to use\*** |
| 1. Define type of expertises needed for Invitation to expand the network | WG meeting |
| 2. Define sub groups (referent) |  |
| 3. Define sub-tasks activities | STSMs |
| 4. Define Workshop topic | WG meeting |
| 5. Define Training School targets | WG meeting |
| 6.  |  |
| 7.  |  |
| 8.  |  |
| ….*Add as many rows as necessary* |  |

\* WG meeting(s) and/or Workshop/Conference and/or STSMs and/or Training Schools and/or ITC Conference Grants and/or Dissemination  |

|  |  |
| --- | --- |
| COST Action: CA19145 | WG Number: 4 |
| Discussion Coordinator (s): Ivan Štajduhar and Declan Delaney |
| Meeting Participants interested in the WG: Ivan Štajduhar (Croatia), Declan Delaney (Ireland), Stevan Stankovski (Serbia), Dijana Blazhekovikj-Dimovska (North Macedonia), ??? |
| **4 YEAR PLANNING: MoU Tasks and Deliverables - Brainstorming and Main Insights**1. Identify a use-case slice from farm to consumer for an identified use case
	1. Liaise with each WG to determine a single use-case that is of interest to all
	2. Identify the target problems that can be supported by ICT
	3. Determine goals feasible for modelling
	4. Use this to develop integration strategy for new technologies
2. Identify / establish the industrial standards for the DSSs as control systems in the FSC
	1. With respect to the use-case slice: PC / embedded / cloud computing; small or large-scale; responsiveness; communication standards between devices; robustness; data exchange protocols; HCI standards; and so on
	2. ***D:*** *Technical report on the industrial standards for the DSSs as control systems in the FSC*
3. Develop end-to-end methodologies for implementing DSSs as control systems in the FSC
	1. Identify the performance validation standards - evaluation of every aspect of the end-to-end methodology
	2. Develop a strategy for fusing the data from other (non-NDSS) sources with the NDSS data
	3. With respect to the modelling goals, identify / establish contemporary / novel data exchange protocols and HCI protocols
	4. ***D:*** *Technical report on end-to-end methodologies for implementing DSSs as control systems in the FSC*
4. Attract researchers from other fields and recruit (specialise) new PhD students and ECIs for implementing ICT in the field of food integrity and process control
	1. New collaboration opportunities
	2. ***D:*** *STSMs between researchers in different fields*

Some remarks:* WG4 tasks rely heavily on the tasks and deliverables of other WGs
* Tasks of WG4 should be modified accordingly
 |
| **Next Steps & Grant Period Planning: next 12 - 18 months**

|  |  |
| --- | --- |
| **Goals for the period**  | **Networking tool(s) that you would like to use\*** |
| 1. Identify a use-case slice from farm to consumer for an identified use case | WG meeting, STSMs, Training Schools |
| 2. Identify / establish the industrial standards for the DSSs as control systems in the FSC | WG meeting, STSMs, Training Schools |
|  |  |
|  |  |
|  |  |
|  |  |
|  |  |
|  |  |
|  |  |

\* WG meeting(s) and/or Workshop/Conference and/or STSMs and/or Training Schools and/or ITC Conference Grants and/or Dissemination |

This is a short summary about what we have discussed about **Dissemination and Exploitation – WG5**

**Pending items:**

* Why is relevant to communicate?
* What should be communicated?
* Who is the target audience?
* How should the communication be achieved?
* Which level (tools and channels) should be used for the communication?
* When should we start to communicate?

**Ideas from past COST actions:**

* Creation of visual identity and management of Action website
* Organisation and coordination of Action events
* Stimulation of networking
* Supporting involvement of PhD students and ECI
* Creation of database of research project and experimental facilities in the domain of the Action
* Preparation of dissemination and communication strategy (through journals, conferences, trade publications, website, exhibitions, shows)
* Social media campaign with defined priority and targets
* Identification and involvement of relevant stakeholders
* Organization of industry workshops
* Increasing of social awareness
* Involvement of policy makers
* Contribution to standardization
* Identification and assessment of Key Exploitable Results
* Protection of IPR
* Definition of measures and assessment of scientific, environmental, economic, and social impact
* Life beyond COST action -> joint research proposals at the end of the Action’

|  |  |
| --- | --- |
| COST Action: CA19145 | Topic Title: Managing and growing the network |
| Discussion Coordinator (s): Tom Fearn UK, Judith  |
| Meeting Participants who attended this discussion: Lola Perez Marin ES, Stefan Lundgren SE, Cristina Maguas PT, Radu Ionescu EE, Anders Larsen DK, Paolo Berzaghi IT, Nataliia Sivchenko NO, Martin Lagerholm SE |
| **Desired Output:** All the deliverables, of course, but in particular industry take up of this technology. |
| **Main Insights and Ideas:** There is good representation from Universities and Research Institutes and we have instrument developers and manufacturers on board. We need more input from food industry participants, including manufacturers, distributors and maybe even retailers, regulators and possibly trade consortia. The level of interaction here might range from answering questions about their dreams, ie what problems would they like to solve, through to taking part in feasibility studies or even demonstration projects (though the funding for these would need to come from another source ). Several discussants stressed the need for focus – we can't tackle the whole food industry with the resources available, and we need to establish a focus early on so we can get into a few applications in some depth. There were differing opinions about the relative merits of concentrating on fraud and authenticity issues for high-value products or on basic (profit related) measurements like water or fat. Ideally we might be able to do both with one instrument.  |
| **Resources needed** Not obvious yet. An industry-oriented workshop might be useful at some point. |
| **Next Steps**Possible steps include* ask WG leaders for identifying what their WG needs by way of stakeholder participation and suggesting how to achieve this, the 5 reps would network to coordinate ideas
* ask individual MC members for suggestions for stakeholders it will be important to involve
 |

|  |  |
| --- | --- |
| COST Action: CA19145 “European Network for assuring food integrity using non-destructive spectral sensors” (SensorFINT) | Topic Title: MANAGING REQUESTS TO JOIN THE WORKING GROUPS  |
| Discussion Coordinator (s): Antonio Cesar da Silva Ferreira |
| Meeting Participants interested in contributing to the topic: *DK, PT, SK, ES* |
| **Desired Output:** *To* ***Populate*** *WGs with the required competences to enable to attain their objectives and to properly* ***Orientate*** *participants to the relevant WG which will match the personal competences and expectations.* |
| **Main Insights and Ideas:*** *To establish “Roles” and “Rules” for the CA regarding the roadmap for inclusion of individuals in WG.*
* *Define WG set of “Key Words” of competences scored/weighted by relevance to the mission.*
* *To establish a Competence Profile for the WG -> Feature (wg) !*
* *To establish a Competence Profile for the Individuals -> Feature (i) !*
* To establish a match criteria WG versus individuals
 |
| **Resources needed** *Budget to :** *Web Site*
* *Invite people*
 |
| **Next Steps*** Roles & Roles to definition.
* *establish a Competence Profile for the WG*
 |

|  |  |
| --- | --- |
| COST Action: | Topic Title: DT3: Decide who to invite and reimburse for Action meetings**Rapporter Paul Brereton** |
| Discussion Coordinator (s): **Paul Brereton** |
| Meeting Participants interested in contributing to the topic:Andreas Niemoeller DE, Mihai (RU), Maria Tarapoulouzi (CY), Wouter Saeys (BE), Mecit (TR)Tania Gonzalez Ovin (COST), Jeannette Nchung Oru (COST) |
| **Desired Output:** Strategies and priorities to be considered with respect to the COST Action travel and subsistence budget |
| **Main Insights and Ideas:** 1. Focus should be on using T & S for researchers/research focussed travel as management activities can be achieved more cost effectively through virtual meetings.
2. It is likely, due to COVID 19 that this years T & S budget will be underspent. Contingencies should be made now for transferring budget to other categories (otherwise it will be lost)
3. In terms of prioritisation of researcher support; a) to support research gaps, b) ECI, c) ITC
4. There should be a focus on STSMs
5. The above form an initial basis for developing criteria and developing a selection process
6. Need a clear strategy for promoting research visit opportunities-with a link to website and other communication resources
 |
| **Resources needed** *Budget and communication resources* |
| **Next Steps** |

|  |  |
| --- | --- |
| COST Action: CA19145 | DT4: Grant awarding – Short Term Scientific Missions (STSMs) and Inclusiveness Target Countries (ITC) Conference Grants.  |
| Discussion Coordinator (s): Vincent Baeten |
| Meeting Participants interested in the WG: *add name (country)*Mecit (TR)Marina Tarapoulouzi (CY)Aoife Gowen (IE)Wouter Saeys (BE)Lola Pérez Martin (ES) |
| **4 YEAR PLANNING: MoU Tasks and Deliverables - Brainstorming and Main Insights***Check the description of the WG in the* [*MoU*](https://e-services.cost.eu/files/domain_files/CA/Action_CA19102/mou/CA19102-e.pdf)*. Discuss with your colleagues what needs to be done and how. Summarise for future reference.*Meeting’s notes (30 – 09 – 20)* STSMs and ITC grants are essential for the success of the project
* Quid the possibilities to complete STSMs and ITC grants due to the COVID situation?
* What could be the alternative to ITC?
* On-line poster presentation + prize (e.g. registration fees to on-line conference, fees to publish in open access journal)
* For STSMS, we could establish in the first six months a first selection, a list of grant holders and finance the ones that are authorised regarding the COVID status of the country of origin as well as the country of destination). The other selected grants will be priority financed as soon as the conditions are completed.
* Selection criteria have to be defined:
* Country balance
* Working Group balance
* Gender balance
* Early Stage Researcher
* …
* Who will evaluate the proposals? We have to establish a scoring system.
* In the second year of the project, we have to do an open/public call (not only the consortium members) for STSMs and ITC.
 |
| **Next Steps & Grant Period Planning: next 6 - 12 months**

|  |  |
| --- | --- |
| **Goals for the period**  | **Networking tool(s) that you would like to use\*** |
| 1. |  |
| 2. |  |
| 3. |  |
| 4. |  |
| 5. |  |
| 6. |  |
| 7.  |  |
| 8.  |  |
| ….*Add as many rows as necessary* |  |

\* WG meeting(s) and/or Workshop/Conference and/or STSMs and/or Training Schools and/or ITC Conference Grants and/or Dissemination  |