




Operative Instruction for InterCinD-IC9IND Participant Laboratories

IO 01P Instruction to Participants rev. 17 – 10/05/2021

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	INSTRUCTION TO PARTICIPANTS	

1. OBJECT

This document is reserved to InterCinD participant Laboratories. Its aim is to give detailed instructions and information about the Scheme of InterCinD PT.

In the following you will find all the necessary instruction to subscribe your Lab and manage your participation in terms of:

- I. Scheme Organization
- II. Kind of samples
- III. General Info about the Scheme
- IV. Time Schedule and participation details
- V. Sample shipment management
- VI. Quality info and procedures

2. OPERATIVE INSTRUCTIONS

2.1. Scheme Organization

InterCinD is a LabService Division dedicated to PT Organization and Management

InterCinD is born in year 2013: its members experienced 12 years of CIND PTs and joint the InterCal experience by Dr. Van Bavel.

LabService Analytica with InterCinD Division is accredited ISO/EN17043 (ACCREDIA-PTP0007 P) from February 2015

ORGANIZATION: LABSERVICE ANALYTICA SRL with its dedicated Division InterCinD

ECONOMICAL MANAGEMENT: Dr. Ivano Battaglia

TECHNICAL DIRECTOR: Dr. Claudio CARRER (info@intercind.eu)

SCHEME COORDINATOR: Dr. Simona Manganelli (manganelli@intercind.eu)

SAMPLE PREPARATION: InterCinD

ANALYSIS FOR HOMOGENEITY: Subcontracted: THETIS, ECO-CENTER, BZ

STATISTICAL ELABORATION: Dr. Claudio Carbone (info@intercind.eu)

2.2 Kind of Samples

One of the InterCinD main features is the choice of real samples from nature used “as they are”, not spiked as generally happen.

This specific choice means that:

- InterCinD does not require particular methods of sample preparation or analysis
- InterCinD does not specify a target concentration or pollutants sample content
- Every sample has to be managed and analyzed like every other sample that any participant laboratory receives daily by his customers

For this InterCinD9IND-2021, InterCinD collected the following kind of samples:

- ✓ **INDUSTRIAL**- Municipal Waste Plant - Fly Ash dried and homogenized

Powder, 10 GRAMS, Homogenized, Dried, Sieved (Granulometry < 90um) and Homogenized again– 1 SET of 3 bottles (total amount 30grams)

PLEASE PROVIDE DATA ABOUT EXTRACTION TECHNIQUE ADOPTED: ACID TREATMENT OR NOT. WHICH KIND OF ACID – THANKS

The congeners to be determined ARE: PCDD/Fs, PCBs, PAHs, Heavy Metals

The complete list of congeners is reported in the InterCinD-DTForm (MD19) that you can download from the website after samples shipments, as detailed in the IO02.

PCDD/F	PCB-DL
2,3,7,8-TeCDD	PCB #77
1,2,3,7,8-PeCDD	PCB #81
1,2,3,4,7,8-HxCDD	PCB #105
1,2,3,6,7,8-HxCDD	PCB #114
1,2,3,7,8,9-HxCDD	PCB #118
1,2,3,4,6,7,8-HpCDD	PCB #123
OCDD	PCB #126
2,3,7,8-TeCDF	PCB #156
1,2,3,7,8-PeCDF	PCB #157
2,3,4,7,8-PeCDF	PCB #167
1,2,3,4,7,8-HxCDF	PCB #169
1,2,3,6,7,8-HxCDF	PCB #189
1,2,3,7,8,9-HxCDF	PCB ICES-6
2,3,4,6,7,8-HxCDF	PCB #28
1,2,3,4,6,7,8-HpCDF	PCB #52
1,2,3,4,7,8,9-HpCDF	PCB #101
OCDF	PCB #138
	PCB #153
	PCB #180

PAH "IC-CLASSIC"	OTHER PAHs	HM&Metals
Benzo[a]anthracene	Naftalene	Ag , Al, As, Cd, Cr
Chrysene	Acenaftilene	Cu, Hg, Mn, Ni, Pb
Benzo[b+j+k]fluoranthene	Acenaftene	Sb, Se, Sn, Zn
Benzo[a]pyrene	Fluorene	
Indeno[1,2,3cd]pyrene	Fenantrene	
Dibenzo[a,h]anthracene	Antracene	
Benzo[ghi]perylene	Fluorantene	
	Pirene	
	Benzo[e]pirene	
	Perilene	

✓ **INDUSTRIAL** – SOIL from Industrial Site

Powder, 10 GRAMS, Pre grinding with stone roller, sieve of the coarse material. Homogenized, Dried, Sieved (Granulometry < 90um) and Homogenized again– 1 SET of 3 bottles (total amount 30grams)


The congeners to be determined ARE: PCDD/Fs, PCBs, PAHs, Heavy Metals

The complete list of congeners reported in the InterCinD-DTForm (MD19) that you can download from the website after samples shipments, as detailed in the IO02, that you will receive after Samples Shipment from our warehouse is the following:

DIOXINS	PCB-DL	Other PCBs
2,3,7,8-TeCDD	PCB #77	PCB #95
1,2,3,7,8-PeCDD	PCB #81	PCB #99
1,2,3,4,7,8-HxCDD	PCB #105	PCB #110
1,2,3,6,7,8-HxCDD	PCB #114	PCB #128
1,2,3,7,8,9-HxCDD	PCB #118	PCB #146
1,2,3,4,6,7,8-HpCDD	PCB #123	PCB #149
OCDD	PCB #126	PCB #151
FURANS	PCB #156	PCB #155
2,3,7,8-TeCDF	PCB #157	PCB #170
1,2,3,7,8-PeCDF	PCB #167	PCB #177
2,3,4,7,8-PeCDF	PCB #169	PCB #183
1,2,3,4,7,8-HxCDF	PCB #189	PCB #187
1,2,3,6,7,8-HxCDF	PCB ICES-6	PCB #188
1,2,3,7,8,9-HxCDF	PCB #28	PCB #205
2,3,4,6,7,8-HxCDF	PCB #52	PCB #206
1,2,3,4,6,7,8-HpCDF	PCB #101	PCB #208
1,2,3,4,7,8,9-HpCDF	PCB #138	PCB #209
OCDF	PCB #153	
	PCB #180	

PAH "IC-CLASSIC"	OTHER PAHs	HM&Metals
Benzo[a]anthracene	Naftalene	Ag , Al, As, Cd, Cr
Chrysene	Acenaftilene	Cu, Hg, Mn, Ni, Pb
Benzo[b+j+k]fluoranthene	Acenaftene	Sb, Se, Sn, Zn
Benzo[a]pyrene	Fluorene	
Indeno[1,2,3cd]pyrene	Fenantrene	
Dibenzo[a,h]anthracene	Antracene	
Benzo[ghi]perylene	Fluorantene	
	Pirene	
	Benzo[e]pirene	
	Perilene	

PLEASE NOTE: your lab can decide to present analytical data for ALL THE ANALYTES IN THE LIST or for SOME OF THEM only.

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2.3 General Instructions

- a) InterCind ask to every participant Lab to manage PTx samples as the majority of the routinely tested samples
- b) The factors that could influence the testing or calibration of PTx items are limited to the method of sample preparation or analysis you adopt in your Lab
- c) The PTx scheme does not require particular procedures for preparing or conditioning the items, please follow your methods and specify the adopted one in the Data Transmission Form (MD19-InterCinD-DTForm)
- d) The PTx items are collected as real samples (environmental, industrial and Food) and are NOT spiked with pollutants. The contamination level is the one they have in their original environment, and should be handled following the routinely safety requirements of your lab and Country
- e) Considering the PTx items, no particular requirements about environmental conditions are specified
- f) Every sample set is 3 bottles. We ask to every lab to analyze EACH BOTTLE in a different moment and TO CONSIDER the content OF THE BOTTLES as three different samples. IN ACCORDANCE WITH ROUTINE LAB PRACTICES, EACH BOTTLE CAN BE MEASURED IN REPLICATES, BUT ONLY ONE MEASURE FOR EACH BOTTLE NEED TO BE REPORTED (TYPICALLY THE MEAN).

2.4 General Instructions for Subscription and Scheduling

- a) To subscribe the InterCinD IC9IND PT, please send back the subscription form (MD11M or MD11) duly fulfilled to: InterCinD Organization (to Dr.ssa Simona Manganeli) by e-mail to: manganeli@intercind.eu before **15th May 2021**


You have to specify:

- The kind of samples required (check the box) and write the quantity
- Fulfill the form with your data for the shipment and for the reference of data transmission and technical question (SHIPMENT ADDRESS)
- And also the right address and Company for the invoice emission with your account reference (if available) and e-mail for administration question (INVOICE ADDRESS)
- If you authorize to receive technical info or advertising, please sign the PrivacyDisclaimerandAuthorization, if you do not authorize, do not sign.
- If you have a Promo: ADD YOUR DISCOUNT to the total amount due
- Now looking the Price list, please check the right cost for your choice considering:
 - The total quantity of samples you are asking for (the price list maximum quantity is 3 samples, if you like to receive more than this, please ask for a quotation)
 - As you can notice, in this edition we defined a FULL PARTECIPATION MODE considering Laboratories participating for all the samples available and PARTIAL PARTECIPATION for those Labs who needs one kind of sample. At

the same time a FULL participation lab could decide to require more samples of one kind

For calculating the final price of your subscription you have to add the quote of the box nr/kind of sample you checked, less % discount if early subscription.

- b) Then send this form to manganelli@intercind.eu and if required by your Company send a formal purchase order with any detail for your management
- c) Receive the pro-forma invoice sent by InterCinD, proceed with the payment for the amount due. If your account Dept. needs info or find problems, please contact manganelli@intercind.eu. Please do not provide payment before pro-forma invoice emission. If you like to pay by Credit Card, please inform us and we will send you a dedicated weblink for payment.
- d) At the end of the subscription steps and after payment received, InterCinD will ship the required samples by carrier. Please remember that package for any sample SET is: 3 (three) bottles/sample. You will receive an e-mail advise by the carrier that the shipment is leaving. Please Confirm that you received the samples. You will receive by e-mail detailed instruction for register your Lab in the Reserved Area Registration on www.intercind.eu (IO02)
- e) Samples will be sent to participants from **15th May 2021** (after completed subscription steps and payment receiptment) to **30th May 2021**. Please remember that package for any sample is: 3 (three) bottles/sample.
- f) Analytical Data Results must be insert in your Reserved Area on InterCinD website strictly within **10th July 2021**
- g) For recording and reporting measurement results, you have to fulfill the Data Transmission Form (MD19-InterCinD9IND-DTForm) as specified in it. No calculations are required. Please note that you have to fulfill the Additional Info for the complete data registration
- h) In this edition MD19Form you will find also a sheet called "BEST". In this area you are invited to insert the best value from your replicates and data collected, that will be adopted to determine the PT consensus value. You can decide to insert a specific replicate, an average value or, a median. Please specify in the COMMENT/NOTE section which choice this value refers to.
- i) The unit of measurements, the numbers of significant decimal places and any other reporting basis, are detailed on the first page of Data Transmission Form (MD19-InterCinD9IND-DTForm). More details are reported on IO02P In any case, for any info and request please contact manganelli@intercind.eu

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- j) After your access to the website reserved area You'll receive your LAB Number, info about the analytes range and the excel form for the data transmission (InterCinD-DTForm). Please Remember your LAB Number and report it on your excel form for the data transmission (in the file name too) as detailed in IO02
- k) Insert your final data in your reserved area (www.intercind.eu) **10th July 2021.**
- l) Confirm your data on the website form (then you will not be able to modify it again)
- m) Download the Final Results Report and your Participation Degree from your Reserved area on the www.intercind.eu (**30th August 2021**)
- n) Please note, if the Lab is not able to present data for statistical elaboration, no money refunds is possible.

2.5 Sample shipment and recipient confirmation

When InterCinD proceed with the sample shipment to participant Labs, any reference e-mail for the PT will receive an e-mail communication with:

- Date of the shipment
- Carrier
- Reference Nr of the Shipment (AWB Nr)
- Request of receiptment confirmation
- Instruction for the access to the website Reserved Area (IO02P) and detailed for the creation of your Lab. Nr and for the downloading of InterCinD -IC9IND-DTForm

2.6 How to proceed if:

- **You receive a broken or defective sample**
- **You have to make a complain or a suggest**
- **You want to dispute the final results**
- **You want to request an appeal**

2.6.1 How to proceed if you receive a broken or defective sample

If you receive a broken or defective sample, please DO NOT USE it for the PT and inform manganelli@intercind.eu within 10 days after receiptment. In this way you will receive a new sample for your participation.

2.6.2 How to proceed if you have to make a complain or a suggest


If you like to suggest anything for the actual or future PT, please write to manganelli@intercind.eu.

If you need to make a complain, write to manganelli@intercind.eu explaining the problem and anything else useful for its evaluation.

Considering the nature of your complain, we will involve the Technical Director or any other figure involved to define the best approach and solution.

We will promptly inform you about any development and final proposal.

2.6.3 How to proceed if you want to dispute the final results

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Write your dispute argument to manganelli@intercind.eu and info@intercind.eu. InterCinD will evaluate your argument and proceed with a reply to your request or with the emission of a new Final report. In this case every PT Participant Lab involved on the same argument will be informed of the situation.

If you do not accept the reply, you can ask for an appeal

2.6.4 How to proceed if you want to request an appeal

Write to manganelli@intercind.eu, detail the claim matter and ask for an appeal within 20 days from the Report emission date. InterCinD Commission could ask more details or info about your arguments.

3. STATISTICAL EVALUATION

The InterCinD IC9IND-DTForm opportunely prepared for reporting results force the laboratories to use uniform specification of detection limit (e.g. " < 0.0001 ") and is required to insert NA or ND specification when sample is not analyzed or concentration is below detection limit.

Data treatment follows a series of steps that aims

- a) at the definition of the assigned value for each congener in each matrix, and
- b) at the definition of performances of each laboratory.

The assigned value is the value selected as being the best estimate of the 'true value' for the parameter under test. For natural matrixes of unknown concentrations as those used in InterCinD, the assigned value is determined as the value with the greatest consensus. Since the assigned value is determined from the consensus value of participant results, robust statistical methods are used for calculation of the consensus value, the estimated standard uncertainty and the robust standard deviation. Once defined the consensus value and its uncertainty, this is used as assigned value and uncertainty for determining laboratories performances.

The steps of data treatment are:

- 1) Data acquisition and first check on format of data provided by laboratories;
- 2) Calculation of a series of statistical properties (see in the following) for each congener and each matrix;
- 3) Identification of extremes that are not included for the determination of consensus value;
- 4) Determination of consensus value and its uncertainty for each congener of each matrix;
- 5) Assessment of laboratories' performance in terms of accuracy;
- 6) Assessment of laboratories' performance in terms of precision;


4. NOTE AND OTHERS

InterCinD could subcontract some activities, in particular:

Sample preparation,
Homogeneity tests

InterCinD Materials are available for at least 6 months year after the PT Scheme Report emission. After this period, the detailed list of the available materials can be viewed on www.intercind.eu

InterCinD will not spread your data outside PT Participant Laboratories and will not supply your Company reference to other subject if not explicitly authorized by your subscription format.

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The identity of Participants is confidential and known to person involved in the operation of the PT Scheme only, unless the participant waives confidentiality.

All information supplied by Participant Labs to PT provider are treated as confidential

In exceptional circumstances, when a regulatory authority requires PT results to be directly provided to the authority by the InterCinD, the affected participant will be notified of this action in writing.

Note: All participant records will be kept secure and confidential, and retention time is established in 48 months.

Please consider that some activities could be subcontracted, in any case the PTP is responsible to the participants for the subcontractor's work, except in the case where a regulatory authority specifies which subcontractor is to be used.