OECD Working Party on Manufactured Nanomaterials Guidance for the use of OECD Database on Research into the Safety of Manufactured Nanomaterials

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This document provides guidance for the use of the OECD Database on Research into the Safety of Manufactured Nanomaterials. This will be a document to be shared with the WPMN and stakeholders who will contribute to the database. Some of the text will be presented as "pop-up" guidance or text descriptions on the various user interfaces.

The Guidance has three sections, each of which targets different levels of users:

Section I: General Information guidance for end users – the general public who will search the database.

Section II: Guidance for Data Providers (DP) who enter or edit project information, while Section II will be accessible for Designated Contact Points (DCP) who are responsible for the quality of data entry by DP (Noriko – this is to address concerns of DCP's that they cannot be held responsible for the data per se rather the way it is entered in the database) Some of the guidance will be also made publicly accessible because it may help the end user to understand the information in the database.

Section III: guidance specifically for DCP.

In addition, **an Appendix** will be prepared to describe graphics and icons used in the interface of the database.

INTRODUCTION

Objective:

1.   The objective of the Database on Research into the Safety of Manufactured Nanomaterials (the Database) is to develop a global resource, which identifies research projects that address human health and environmental safety issues associated with manufactured nanomaterials. It builds on the database of the Woodrow Wilson International Center for Scholars: Nanotechnology Health and Environmental Implications: An Inventory of Current Research ("the WWC database") and is being further developed into a global resource.

Development:

2.   The Database will be developed in two phases. **Phase 1** is to establish a database of research projects that are planned, underway or completed. In addition, links to other relevant databases have been included, for example, the 'Environmental Health and Safety Database' by International Council on Nanotechnology(ICON) and 'Nanoparticle Information Library' by US National Institute for Occupational Safety and Health (NIOSH)..

3.   **Phase 2** will extend the database by:

- Linking to other relevant databases, including national and regional databases such as CORDIS, EC Nanocare, EC Nanosafe;
- Increasing functionality, such as the ability to search multiple databases;
- Including other types of information on nanomaterials, such as the use of nanomaterials, in order to develop information on human and environmental exposure.

Phase 1

4.   This guidance document relates to **Phase 1 of the database only**. The main aims of this phase are to:

- develop a global resource, which identifies research projects that address safety issues associated with mainly manufactured nanomaterials;
- assist those who are planning research in these areas to identify research needs, while avoiding duplication;
- provide opportunities for researchers to identify scientists working in similar fields, and possibly lead to collaboration and networking;
- provide critical information and support for each of the other projects of the WPMN; and
- link to other relevant databases so as to ensure the database is a global and comprehensive resource.

SECTION I GENERAL INFORMATION

How *are* ***manufactured nanomaterials defined*** *for the purposes of this database?*

5.　　　In the absence of an internationally agreed definition of nanomaterials the following definition will be used for the purposes of this database:

Manufactured nanomaterials: Nanomaterials intentionally produced to have specific properties or specific composition, a size range typically between 1 nm and 100 nm and material which is either a nano-object (i.e. that is confined in one, two, or three dimensions at the nanoscale) or is nanostructured (i.e. having an internal or surface structure at the nanoscale).

What *information is to be* ***included*** *in the database?*

6.　　　The focus of the Database is to collect safety research information on manufactured (engineered) nanomaterials as defined above. Information on incidental or naturally produced nanomaterials is to be included <u>only</u> if it is highly relevant to understanding safety issues associated with manufactured nanomaterials.

7.　　　Information relevant to life-cycle assessment of nanomaterials will be included, such as characterisation, physico-chemical properties, exposure (human health and environmental) assessment, toxicology (human health and ecological) and control measures. Please see <u>paragraph 50-58</u> for more information about categorisations in the database.

How *has the database been* ***established***?

8.　　　The database has been pre-populated with research projects transferred from the Woodrow Wilson International Centre for Scholars: Nanotechnology Health and Environmental Implications: An Inventory of Current Research (WWC database). Given that the focus of the OECD Database is on manufactured nanomaterials, projects categorized as "manufactured" with "High, Substantial, Some, or Marginal" relevance, and the projects categorized "non-manufactured" with "High" relevance in the WWC Database are included in the Phase 1 of this database (Definitions of various degrees of relevance is provided in <u>Paragraph 50-51</u>).[1] ***Delegations are requested to check their respective entries in the database to ensure that they are in fact relevant to the life-cycle assessment of manufactured nanomaterials, particularly the entries classified as "non-manufactured"[2].***

9.　　　Additional information on research projects provided by delegations will also be included in the database.

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1 .　　　Notes: *This paragraph will be verified after the data population before the public launch delegations may change and delete some of WWC data*

2 .　　　Notes: *The last sentence will only be available during the data population period before the public launch*

*How is the database **searchable?***

10.   A public internet web interface (http://webnet.oecd.org/NanoMaterials) is provided so that users can search and view details of all research projects stored in the database. Two levels of searches are possible:

- **Simple search** – this allows the user to search the database with keywords. The keyword search is made against the project title, summary and outcome fields stored in the database.

- **Advanced search** – this allows users to search by different criteria such as keyword text, project information, country and category. Criteria in *Advanced searches* work as a **logical AND**, so that the search will narrow with use of increasing numbers of criteria, (i.e. the more criteria you use, the fewer projects will be selected). When searching by categories, the search engine carries out either "All" or "Any". If "Any" is selected, the projects belonging at least to one category will be selected. If "All" is selected, the projects belonging exactly to all the categories will be selected.

11.   For keyword search, the following methods can be used:

Search methods	Examples	
Words	Nanomaterial, silver, carbon	
Phrases	"Titanium dioxide", "Environmental toxicology"	To search for words in an exact order, include the phrase in double quotation marks.
Boolean operators		
(Space) &	<u>Nanomaterials safety</u> <u>nanomaterials & safety</u> (both return same results)	The character "&" represents the boolean operator "AND". The both keywords shall be included in the search result. By default. the search engine carries out one AND between the words keys.
|	Nanomaterials| safety	The character "|" represents the boolean operator "OR". The research result will contain at least the one of the two words figuring on either side of the operator.
-	-nanomaterials	The character "-" allows searching the database that does not include the keyword. The operator must be stuck to the word.
Wild cards: *	*nano*	The asterisk is a wild card to look for a word beginning or finishing by. The operator must be attached to the word. * indicates the replacement of zero to many characters.

12.   The search engine for keyword has the following features:

- Targeted fields when searching by keywords are: Investigator's Job Title, First Name – Last Name – Institution, Related file's description and the file itself, the description of the Related WebLink, descriptions of categories and subcategories, Category, description of status.
- The documents in Microsoft Word format (. doc) and PDF (. pdf) format attached to the project outcomes will be searched.

- For a search including an element from drop-down lists, the search engine carries out AND. The projects having this criterion will be selected.
- When a research contains keywords, the result is posted by relevance according to the number of occurrence of keywords found. Otherwise, there is no any special sorting rule and the projects are listed according to their project reference number.

13.   Additionally, the simple search enables users to access other linked databases of ICON and NIOSH by clicking "Search ICON" or "Search NIOSH" button located under "Search This Database".

*What are **the terms and conditions** for accessing and using database?*

14.   The use and access of the OECD Database is subject to the 'Terms and Conditions for OECD Website Usage' and 'Privacy Policy'. By accessing or using the OECD Database, you agree to be bound by these terms and conditions which may be amended by the OECD secretariat at any time by updating them on the OECD Website. By continuing to use and access the Website you agree to any such updated terms and conditions.

*What process should be followed to **provide feedback** on the database?*

15.   Users are encouraged to provide their feedback to the OECD Secretariat through "contact" (e-mailing to nanosafety@oecd.org) on the bottom right hand corner

*What is the process to acquire **more information on the project**?*

16.   Contact information of investigators for the respective project is provided. It is possible to send an e-mail to the investigator by clicking "Contact" under the investigator section for each project. You will be directed to a new page below, where you may send an e-mail to the investigator through the online mailing application.

What process *should I follow if I wish* **to provide the project information to be included** *in this database or* **edit my project information** *already in this database?*

17.   The information in this database is basically managed by delegations to the OECD Working Party on Manufactured Nanomaterials (WPMN) with support by the OECD Secretariat. Information can be entered or revised through the online web portal, protected by My OECD login ID and password.

18.   The researchers should follow the steps below:

- Step 1: If you already have a "My OECD account", send an e-mail to the respective national delegations to the OECD, (or, if you don't find one from your county, to the OECD Secretariat [nanosafety@oecd.org]) with: 1) name; 2) e-mail address; 3) organisation name; and 4) a representing country or organisation. If you don't have a "My OECD account" yet, please create your own account at the same time. Please see paragraph 28 to create My OECD account.

- Step 2: The respective national delegation and the OECD Secretariat will communicate to set up your access to the database. Once the delegation informs the Secretariat of their agreement that you become a Data Provider for that country, the Secretariat will include you as a data provider to the database. Accordingly, you will have access to the protected website to enter or edit project information. The delegation will contact you with guidance for the entry of the project information.

SECTION II SPECIFIC GUIDANCE FOR DATA PROVIDERS

How is the database administered and managed?

19.   Two distinct roles have been identified for delegations:

·   **Data Provider** (**DP**) - an individual who enters information in the database; and

·   **Designated Contacts Point** (**DCP**) who enters information and/ or assess the quality of data entry within individual delegations.

20.   Delegations will identify DPs and DCPs in their respective countries. Delegations can nominate multiple DPs to facilitate data submission, but the number of DCPs in one country should be limited to ensure consistency. As a default, the heads of delegations to the WPMN will be registered as DCPs. Delegations are requested to advise the OECD secretariat of changes to DCP.

21.   The OECD Secretariat has "administrative rights" which allow them to manage the lists of DPs and DCPs, and also manage the list of categories, and any issues relating to disruption of URLs in records. Access rights for different roles are summarized below:

Position	Role	Actions authorized
End user	• Search database	Access to the Internet interface
Data Provider (DP)	• Provide data	- Access to the "Manage projects" interface - Create a project (Note: automatically considered as the project is from the country of origin) - Edit all information related to a project from the country of origin except for: i) "comment" for administrator (the box is not viewable) ii) box "checked" ; and iii) Field "Project status" if it is "Completed". - View the history of all projects - View all the projects
Designated Contact Point (DCP)	• Provide data • Check data quality	- All actions which DP has authorization - Remove a project from their own country - View and edit the "checked" checkbox
Administrator (OECD Secretariat)	• Manage lists of categories • Manage list of DCP and DP • Check broken link	- All actions which DCP has authorization - Edit comment box by Administrator - Edit list of categories - Edit list of DCP and DP - Edit home page, help, FAQ pages, - Check broken link through a broken link report

22.   As indicated above, Data Providers (DP) are authorised to edit projects from their own country (only). Delegations can nominate multiple DPs through the OECD secretariat.

23.   This position assumes that at least one contact per country will need to act as a DP. It also assumes that an individual will be a DP or DCP for only one country/organization. It is envisaged that in practice there may be some complex situations. In such cases, the OECD Secretariat will help delegations to establish effective arrangements. If there is no solution within the current system for managing the database, the issue will be considered in Phase 2 of the database development.[3]

24.   As a case study, the Canadian proposal for coordinating the respective functions of the DPs and DCPs (see annex I). The case study is provided as guidance only. Delegations are required to develop their own coordination mechanisms based on individual circumstances.

*What is the **process** to **enter**, **edit** and **delete** data?*

25.   Data on research projects will be entered through an admin interface on the internet website. The access to this site is not available to the public. DPs (and DCPs) will need to enter the site through a registered account in OECD, i.e. "My OECD" account. The account should also be registered in the database through the OECD Secretariat.

26.   The admin interface will be shown when you click the "Login" link on the top right of the screen of Home Page of the internet search (see Figure 1). The link will direct you to a message (see Figure 2). The "proceed" button on the message will direct you to a message (see Figure 3) which enable you to enter the ID and Password for "My OECD" account, or to create a new account in OECD.

Figure 1. Login to Admin interface

Figure 2. Message to proceed to My OECD account

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3 .   Note: The delegations to the WPMN are invited to identify such complex situations if they envisage them arising.
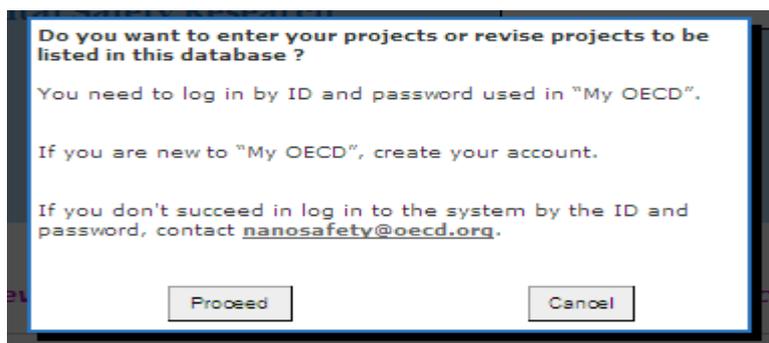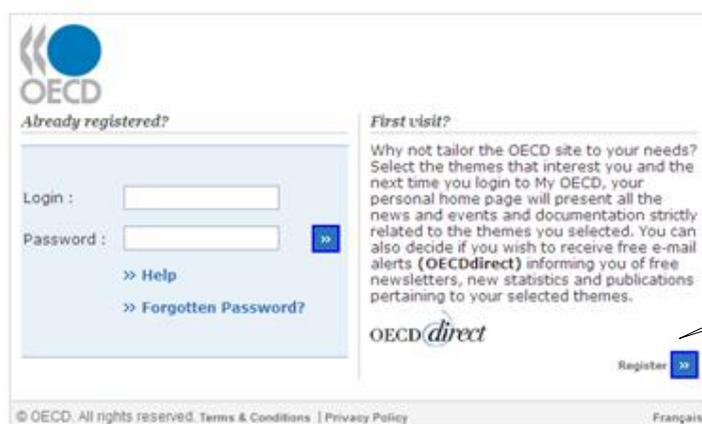
Figure 3.Message to login to My OECD

If you have not registered an "My OECD" account before, please click here to register "MyOECD".

27.   If delegates do not have an "My OECD" account, they will need to create their own Login ID and Password by clicking "register" in the right corner of the page (Figure 3). This will be followed by a page to create "My OECD" account[4].

28.   If delegates cannot access the site after creating a My OECD account, it is because the registration in the database might not properly completed. The delegate should contact the OECD Secretariat through e-mailing to: nanosafety@oecd.org.

29.   Once your ID and Password are authorised by the system, Home Page of the internet search with "Admin" link will be shown. The "Login" link should become "Logout" (Figure 4). The "Admin" link will direct you to the "Manage Project" page where you will be able to search, create or edit information of projects from the country of origin. (Figure5). If Figure 5 does not appear there would be a problem with the registration. Please contact the OECD Secretariat through e-mailing to: nanosafety@oecd.org.

30.   The OECD Secretariat will add the contact information to the OECD's system. In parallel, the individuals will receive an e-mail with the guidance document and the procedure to access the password protected website.

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4.   My OECD account is not only for this database but also for other OECD public websites. Therefore at its registration page, delegates will be asked some questions which are not related to this database, on the account creation page.

Figure 4. Home page after "Log in"

Figure 5. Manage Project page

34.   It is acknowledged that certain research projects will involve multiple researchers potentially across delegations (trans-national). It is important to avoid duplicate entries in the database in such instances. To this end, it is proposed that the <u>designated project coordinator</u> act as the DP for this project. This approach will minimise duplication of entries and potentially facilitate collaboration between international project researchers. It will also be the function of the DCPs to identify duplicate entries in the process of verifying data.

*What information **must be** (and is suggested to be) **included** as project information?*

35.   The following information is included in the Database (further guidance is provided below)

- Project Title*; Start (month/year); End (month/year);

- Project Status**: (Current; planned; or completed);

- Country or organisation*;

- Funding information (Approximate Total funding (USD)**; Approximate Annual Funding (USD)**; Total Funding in local currency; and Funding source**, see more details in <u>paragraph 4042</u>);

- Project Summary**;

- Project URL; Related web links; Description of related web links.

36.   These fields with flagged with asterisks (*) are mandatory in different levels. (*) means mandatory field to save the project as a draft; (**) means a mandatory field necessary to "publish" the project (i.e. make the project information publicly available.)

*How do I **ensure consistent and accurate recording** of project status in the database?*

37.   The database will include research projects that are planned, underway, completed and not-completed.

38.   **Planned** research projects are defined as those projects that will commence in the short-term and for which a project plan and funding arrangements are finalised. Planned research is included in the database to minimise duplication of research efforts and facilitate networking between researchers.

39.   DPs who initially enter projects that are either **planned** or **underway** must ensure that the outcome of the project is updated regularly or at the very least when the project is **completed**. Please note once a project is saved with "**completed**" status, the project status will not be editable by DP or DCPs. Projects that were started but **not completed** could provide useful information for the other researchers, DPs who initially enter projects are requested to input the reason why it is not completed in the field for "outcome".

*How do I **accurately record funding information** for my project?*

40.   Total funding for the project should reflect the total anticipated investment in the research project. Total funding converted to US Dollars is a mandatory field, however this field will be considered together with a check box that enables DPs to be granted an exemption from reporting actual funding. There will be directions that appear on the funding field (such as through a pop-up box) that direct the DP to check the box when seeking an exemption from disclosure of actual funding. The DP will also be directed to include appropriate text in the comments field providing reasons why that exact funding cannot be disclosed. The comments field will not be visible to the public. Funding information in the currency of the award is an optional field.

41.   Funding sources can be described by Government, Industry, Multiple, Other and additionally, if applicable, by the specific name of the fund (e.g. EU Framework Programme, US National Science Foundation- National Nanotechnology Initiative (NNI).) Generic criteria for seeking exemption from disclosing funding information include:

- The research project is not funded from public monies.

- The research project is funded by private enterprise and details of the project are not available in the public domain i.e. "classified business information".

- Where funding is a mix of public and private funding and disclosure of the detail is not possible – in this instance a comment on the proportion of public *vs* private funding may be provided

- Projects for which contracts or grant agreements (i.e. legally binding instruments) are yet to be finalised. Note this may be an interim measure only and funding information can be updated when the agreement is signed.

42.   In order to minimize data entry effort, the database will be programmed to calculate annual funding in US dollars based on the formula: annual funding = [total funding] * 12/project duration (months). DP may modify the calculated annual funding if necessarily. This figure is used when calculating a total sum of the searched projects in Advanced Search.

How should I record my project summary?

43.   Provide a succinct summary of the research project, which can be copied from the research proposal and/or updates to the proposal.

What is required for Project URL; Related web links; Description of related web links

44.   Please provide web address for users of the database to access additional information on the particular project, where available. This will reduce/negate the requirement to provide detailed information on the outcomes of the project – see paragraph 59.

Why information concerning the individual investigator should be provided? Is their contact information sufficiently secured?

45.   At least one investigator's contact information is required to "publish" the project (i.e. make the project information publicly available). The contact information of the investigators is mandatory because the database aims to enable researchers to communicate directly with others where they find possible synergies.

46.   Investigator information required for the database includes: Title; First Name***; Last Name***; Email Address***; Job Title; Institution; Institution Address (Address***; Postal code; City; Country***). The fields with three asterisks (***) are mandatory fields to add/edit investigators to the list.

47.   In certain circumstances, investigators may not wish to make their names public. Given that the First Name, and Last Name are mandatory fields to add/edit investigators, these must be provided to the OECD secretariat (and the DCP) for the purposes of authorising the person(s) to be a data provider(s) for that country/organisation. If so requested, this information will not be made public, rather the default phrase "**not disclosed**" will be used. However, the name of the institution, the address and country will be made public as this information is useful to end users of the database. While the investigator name may not be made public, users of the database will be able to contact the person by using the "contact" provisions described in the paragraph 49.

48.   This section also includes a flag to indicate if the investigator is principal to the project and a field for additional comments.

49.   E-mail addresses for individual investigators will not appear publicly. "Contact" in the investigator information section will link to a mailing format which requests the user to provide their information and questions to be asked to the investigators. In this way, the user may contact the

investigator without knowing his e-mail address. The e-mail address is secured in the OECD server and will not be exposed in public domain. The steps to access to the individual investigator's information are described in paragraph 16.

*How is **research relevance** determined? (**This will be also accessible for End Users.**)*

50.   Research Relevance is included in the database to appropriately capture all research which might have a bearing on understanding potential human health and environmental safety impacts of manufactured nanomaterials. Research is classified has having high, substantial, some or marginal relevance to human health, and environmental safety. This relevance can include, but it is not limited to, testing of manufactured nanomaterials, development of testing methods and tools, modelling, and the approaches to risk assessment of manufactured nanomaterials.

51.   These are "fuzzy" categories, reflecting the complexity of the task. A more quantitative assessment of research relevance is difficult and the following descriptors are provided as a guide:

High: Research that is specifically and explicitly focused on the health, environmental and/or safety implications of nanotechnology.

Substantial: Research that is geared towards nanotechnology-based applications or developing fundamental new knowledge on nanoscience but that has substantial and explicit relevance to Human health, and Environmental Safety implications.

Some: Research that is focused on the application of nanotechnology and developing fundamental new knowledge on nanoscience but that has some relevance to Human health, and Environmental Safety implications.

Marginal: Fundamental nanoscience and/or nanotechnology applications-based research, which might give information on potential Human health, and Environmental Safety implications in some way.

*How were the **research themes** in the database determined? (**This will be also accessible for End Users.**)*

52.   Specific Research themes relevant to manufactured nanomaterials have been developed by a Steering Group under the auspices of the OECD Working Party on Manufactured Nanomaterials. These research themes are provided, as a drop down menu, for DP's to select the most appropriate theme(s) for the specific project.

*How does a data provider **differentiate** between manufactured and non-manufactured nanomaterials? (**This will be also accessible for End Users.**)*

53.   Further to the guidance provided above under general guidance, manufactured (engineered) nanomaterials are defined for the purposes of the database as follows:

Manufactured nanomaterials: Nanomaterials intentionally produced to have specific properties or specific composition, a size range typically between 1 nm and 100 nm and material which is either a nano-object (i.e. that is confined in one, two, or three dimensions at the nanoscale) or is nanostructured (i.e. having an internal or surface structure at the nanoscale)

54.   Non-manufactured (non-engineered) nanomaterials include the following:

- Incidental nanomaterials: Materials with a structure between approximately 1 nm and 100 nm that are *produced as a by-product of a process*. For instance, welding fume and diesel emission particulates would be considered incidental nanomaterials

- Natural nanomaterials: Materials with a structure between approximately 1 nm and 100 nm that are a *result of natural processes*. Some particles arising from volcanic emissions, sea spray, and atmospheric gas-to-particle conversion would be considered natural nanomaterials.

What action is required if the specific research material is not on the list of materials provided in the database?

55.   This field must accurately reflect the class of nanomaterials which the research predominantly addresses. The database provides a list of multiple tick boxes of manufactured nanomaterials currently in commerce or close to commercialisation. These materials are grouped by structure.

56.   DP's are required to pick the test material(s) relevant to their project from the menu provided. If the test material is not included in this list, please advise the OECD secretariat using the e-mail facility provided in the database: "If you don't find an appropriate category on the list above, please contact us (nanosafety@oecd.org) by e-mail."

How are test methods used in a project to be included on the database?

57.   The category of test methods is included as a list of multiple tick boxes. The names of OECD Test Guidelines (TGs) are provided in the list to facilitate searching the database using testing methodology as a search term. A text box is provided to enable DPs to include details of alternate test methods.

58.   The subcategories of Section I PHYSICAL-CHEMICAL PROPERTIES also includes some physical chemical properties identified for the OECD Sponsorship Programme for the Safety Testing of Manufactured Nanomaterials. This categorisation enables the sponsors to find the research projects which test manufactured nanomaterials for those properties.

Trouble Shooting; How do I record "material name" and "testing methods" when such information cannot be provided?

59.   Data Providers can select two alternatives for these fields where material name and testing method could not be reasonably ascertained. The options available are "**not relevant**" when the project does not address specific material or methods, and "**not available**" when the data providers cannot obtain/ provide information for various reasons.

How do I record the overall outcomes and outputs of the project?

60.   Provide a succinct indication of whether the research primarily addresses the impact of engineered nanomaterials on human health, the environment, or safety. A free text box is provided for this purpose. Several options are available for reporting results from a project on the "**Overall Outcomes and Outputs**" tab. These are:

- by text description in Rich text format in the field

- by uploading files onto the database documents in Microsoft Word format (. doc) and PDF (. pdf) format may be attached to the project outcomes and outputs field. Those files will be searchable through the keywords search (Paragraph 11-12)

- by providing project URL where these are available and results recorded

How do I save records, save as a draft or copy information?

61.   Data can be saved as a draft, or a completed record. When clicking "Save", there are two choices: "Save As Draft" or "Save & Publish". "Save As Draft" should be chosen if the data entry is not yet completed. When this option is selected, the record will not be visible to the public. It is recommended that at least the title of the project is entered to create a draft. "Save & Publish" will enable DPs to save the project and make the entry available to the public.

62.   To minimize data entry effort, it is also possible to duplicate project information, where common fields are identified. This function will be useful when DP or DCP have several projects with similar information. The following procedure should be followed: 1) Open the existing project; 2) change fields as needed; 3) click "Save As"; and 4) insert the new title and save. When copying an existing entry it is important that the DP ensures that relevant fields are updated prior to saving so a full research projects are not inadvertently duplicated on the database.

63.   It is recommended that project information is saved often to ensure that the entered data is not lost through activation of the time-out function.

Trouble Shooting: *I filled information but the information was suddenly disappeared when I come back to the computer after lunch. Where the data disappeared?*

64.   This application has automatic time-out function. Therefore, it is recommended that project information is saved often. When creating a project, the user is strongly encouraged to fill the title of the project first and save it as a draft. This will give users more stable circumstances.

Trouble Shooting: *Ii is impossible to "publish" project when not all the mandatory fields are filled. However, I think it would be still useful to make these data available to the public. Is there any temporally solution?*

65.   Recognising that project information are useful for public even though some fields are incomplete, it is allowed to fill the field with a specific statement, "this record is incomplete". It is important that Data Providers make efforts to update the field when the information becomes available. (see also Paragraph 59).

How will issues relating to **confidential business information** *be* **addressed?**

66.   This database will be available to the general public. Therefore, it is not envisaged that Phase 1 entries will include confidential information. A Confidential Business Information policy may be considered during Phase 2 of the database development.

SECTION III SPECIFIC GUIDANCE FOR DESIGNATED CONTACT POINTS

How do DCPs check data?

67.   Ensuring data quality is critical to the integrity of the database and it is the responsibility of DPs to ensure the quality of the data entered. DCPs are required to check the accuracy and internal consistency of data reporting rather that the quality of the data *per se*.

68.   A check box named "Checked" is available next to the "save" button on the right side. (This box is not available to DPs).

69.   DCPs should tick the checkbox when they check the accuracy and internal consistency of data reporting and then "save" the project. If someone (DCP or DP) changes any of information in a project, the checkbox will automatically change to "unchecked". DCP and DP can identify who changed the entry by referring to "history" which is found on the lists of project on the top page.

What is the relevance of the field marked "checked by DCP"?

70.   Once a DP has entered a new project and saved the entry as "Save & Publish", the entry will be publicly available on the website, however the field "checked by DCP" will remain unchecked. This will indicate to users that the particular entry has not been checked by the designated DCP. Once the integrity of data reporting has been checked by the DCP the field "checked by DCP" will be marked and users can identify them as checked projects.

71.   The process for data entry and checking is completely within the control of individual delegations.

Figure 6. View history, Checked
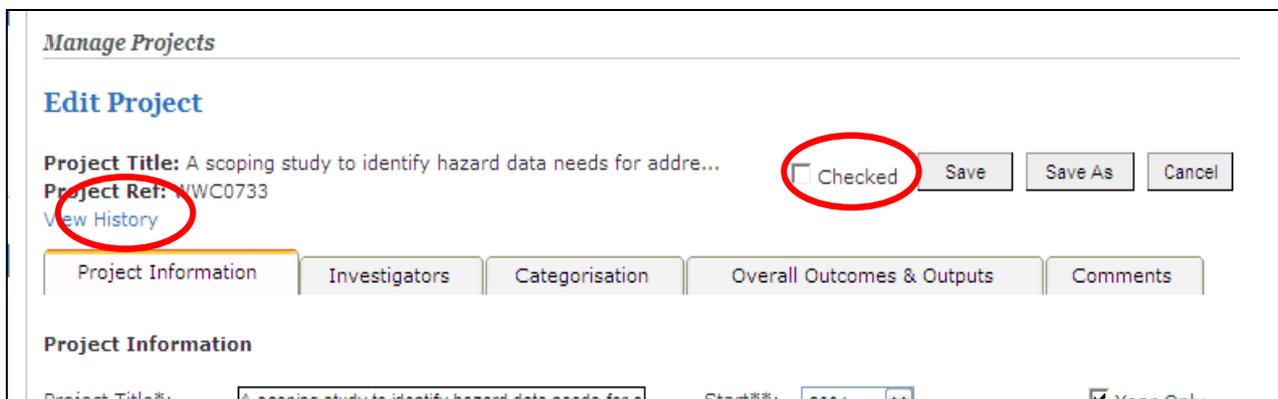
What is the process for DCPs to consult with the OECD Secretariat?

72.   The DCP can send an e-mail to the OECD Secretariat by clicking "Contact" in the menu on the left. When contacting the OECD Secretariat , the DCP is encouraged to include the "Project Reference number" of the project, which is found under the Project Title (Figure 4).

What information is publicly available vs. for internal OECD (including DP and DCP) use only?

73.   The following information is not publicly available and is for internal OECD use only:

- E-mail addresses of individual investigator (see paragraph 49)

- Comments left by DPs and/or DCPs, comments left by administer (OECD Secretariat)

How to manage delete/edit page?

74.   On the "Create/ Edit project" page, DCP can edit or delete the project by clicking "Edit" or "Delete" in the right side of the list of projects. Choosing "OK" after a confirmation window will delete all the information related to this project.

75.   By default, your country/ organisation is selected, thus the list below shows only projects belonging to your country/organization. You can view the other projects by defining a country or an organization. DCP can see "Delete" and "Edit" only those projects belonging to its country.

Figure 7. Edit/ Delete (for DCP)

APPENDIX

This appendix will describe the graphics and icons used in the database interface.

For example:

· 🛈: this icon provides a link to help and guidance for the element; and

· 🗓 : this icon provides a link to a calendar to select a date.

ANNEX
MODE OPERANDI ON DELEGATION OF WORK OF DATA ENTRY TO DATA PROVIDERS IN CANADA

Introduction

In response to the commitment made in Point 15 of the draft Guidance Document for the Database on Research into the Safety of Manufactured Nanomaterials (see the record of February 7 teleconference of SG1),

Canada is proposing the following Modus Operandi on delegation of work of data entry to Data Providers (DPs). It is recognized that this process may not work for all delegations in the WPMN – some many simply not have the resources to undertake this. Canada simply wishes to put its proposed Modus Operandi forward as an example from which other delegations may choose to follow to whatever extent they feel is appropriate.

This Modus Operandi relates to **Phase 1** of the development of the database. The database itself will continually be updated, whereby individual member states will feed project information into the database via the online web portal. The approach being developed in Canada will cover environment, health and physicochemical characterization aspects of EHS research on nanomaterials through three key departments: Environment Canada, Health Canada and the National Research Council of Canada. The approach will also be tailored to best accommodate the realities and mechanisms of Canadian funding agencies such as the Natural Sciences and Engineering Research Council of Canada (NSERC), the Canadian Institutes for Health Research (CIHR) and other provincial funding agencies and funding endowments.

Who will be DPs?

DPs will be limited to Principle Investigators (PIs) of studies. We anticipate that the primary benefit of PIs being the primary providers of data will be good initial quality control of the data. In practice, these projects can be any size and in the Canadian model is likely to predominantly include large multi-university or cross-agency projects with multidisciplinary bridges to address the specific analytical challenges of EHS research.

Who will be DCPs?

Canada will use a primary DCP, who will be a member of the Canadian delegation to the WPMN. An alternate may be used on an as-need basis to allow flexibility in situations where availability and time constraints are an issue.

In fact, while this person will technically be the DCP, the work of the DCP will be supported by three *de facto* DCPs, with work divided by subject area. One person will conduct the function of DCP for human health issues, one for the work on environmental effects, and one for work on characterization and physicochemical studies. The rationale for the use of *de facto* DCPs is that, because of the technically specific nature of the three themes, the specific task of parsing and assessing the data entries can be delegated to those individuals with greater contact with the research community and whose technical

background matches the nature of the data entries. *De facto* DCPs have been identified in each area, however at this point, confirmation has only been made in one case.

Each of these *de facto* DCPs will have expertise in this area.

Roles of DPs and DCPs

Roles of Canadian DPs and DCP are basically the same as the roles provided by the Guidance Material (in paragraph 21).

Engaging PIs and Research Teams

Obviously, a key challenge is engaging researchers to participate in the development of the database. This is integrally tied to the development of a science and research network in Canada. It is therefore incumbent upon the DCPs and the Canadian delegation to the WPMN to actively promote the database and communicate its utility within the Canadian nanotechnology research community.

To this end, the Canadian delegation has made an effort to inform those researchers working in the field of the existence and benefits of the database. While the three different research fields have different levels of awareness, efforts are being ramped up to advertise through a range means such as conferences, meetings, publications, research collaborations as well as direct contact with individual researchers. The fact that *de facto* DCPs are chosen on the basis of their knowledge and connection to and within the Canadian nano-research community is helpful in this regard.