

DATA AND INFORMATION SHARING PROTOCOL

The collection, reporting, and analysis of non-proprietary, non-sensitive data and information associated with this project / engagement shall be governed by the terms of the existing Data and Information Sharing Protocol, attached herewith

1. Objectives

A major component of the Project will be the generation and analysis of discrete and continuous data and information for the efficient operation of the Ontario C/AV, mobility, and electric vehicle ecosystem.

OCI and/or APMA do not intend to collect, analyze or otherwise handle and disseminate data and information considered by Participants (as defined in Schedule A) to be proprietary. OCI and/or APMA will work with Participants to help ensure that the collection of information supports their interests and reflects their project design and business needs.

2. Reporting Requirements

The Data and Information Sharing Protocol (DISP) that is applicable to the Project is made available at ovinhub.ca/programs/resource-documents/, identifies the list of data and information elements required to be reported annually to OCI by Participants that receive support to research, develop, prototype, test and / or demonstrate technologies through, or as a result of Project funding. APMA shall ensure that Participants collect and prepare a complete list of non-proprietary, non-sensitive information and data elements pursuant to the Project, and that Participants report it to OCI using the data collection methods and mechanisms which will be specified by OCI.

APMA shall work with Participants to help them identify any proprietary information and justify requests for this proprietary information to be removed from the reporting requirements as per the amendment process described in section 7. Any proprietary data that will be excluded from the reporting process will be specified as part of the relevant funding agreements between Participants and APMA.

As identified in the DISP, the list of required data and information elements will vary according to the level of maturity and the type of technology, product or service. The protocol differentiates between two different phases of demonstration projects: evaluation phase, and demonstration phase, where projects in the demonstration phase have the highest level of reporting requirements.

APMA shall help Participants declare the level of maturity and types of their technologies, products, and/or services as part of their reporting process.

NOTE: If there is disagreement between OCI and Participants, or APMA and Participants, OCI shall determine which data and information elements apply to any project.

NOTE: If during technology research, development, prototyping, testing and / or demonstration Participants cannot provide data and information for agreed upon data elements because there was no data or information generated matching the particular data element, and/or a particular data element becomes Intellectual Property or a trade secret, APMA will work with Participants to provide a written justification to OCI. OCI shall review the justification and may allow for an exception.

3. General Principles

The Data and Information Sharing Protocol (the “Protocol”) is intended to:

- Support assessment of the performance of the Project and related investments
- Enable the collection of relevant data and information by OCI from The Project, while helping ensure that the commercial interests and intellectual property of Participants is not being violated
- Outline the data and information sharing reporting requirements
- Outline the analysis and public reporting to be undertaken by OCI for the benefit of the entire ecosystem
- Foster openness and collaboration within Ontario’s EV and C/AV ecosystem

4. Protocol Scope

The protocol focuses on data and information elements that describe and assess performance pursuant to the Project. A detailed list of these data and information elements is outlined in the DISP. These elements can be classified into the following categories:

1. **Technology, product, and service characteristics:** data and information elements that describe the different products developed within the Project, their capabilities, possible adoption scenarios, interoperability requirements, and contribution to the overall EV and C/AV ecosystem. Examples of these data and information elements include level of automation, communication standards and protocols, safety and mobility impacts, vehicle and infrastructure types targeted, and potential applications.
2. **Technology, product, and service performance and efficacy:** data and information elements that describe the capabilities of developed products and technologies, within the Project, their market readiness, associated risks, and performance characteristics under different environmental conditions. Examples of these data and information elements include stage of development, types of conditions tested, amount of testing, reliability, level of precision, margin of error, and factors affecting road safety for all transportation system users (e.g., human behaviour, design changes, and interactions with the infrastructure and other equipment).
3. **External requirements for technology operation:** data and information elements that describe cellular and wifi connectivity, remote computing, preferred infrastructure design elements, preferred regulations and encryption protocols.

4. **Project performance:** data and information elements that characterize the overall performance of the Project such as number of project proposals received, number of research projects funded, number of Participants, number and types of prototypes developed, value of private investment leveraged, jobs created or retained, customer interactions, and events hosted.

OCI and/or APMA do not intend to collect, analyze or otherwise handle Intellectual Property or trade secrets. Information will be considered to be Intellectual Property or a trade secret if:

- i. it is required for, or contributes to, a pending patent or copyright publication;
- ii. it is a formula, pattern, program, device, or method which is unique to the business and cannot be shared without risking copy or theft by a competitor; or
- iii. the Participant has demonstrated, according to the amendment process described in section 7, that sharing the information or data with OCI and broader ecosystem would be detrimental to the Participant's business prospects and IP interests.

5. APMA Roles and Responsibilities

- APMA shall work with Participants to help Participants identify, from the list of data and information elements provided in the DISP, the elements that Participants consider proprietary and exclude these proprietary elements from Participants' reporting requirements as part of their legal agreements with APMA.
- APMA shall work with Participants to provide sufficient justification for removing any proprietary data and information elements from their reporting requirements as per the amendment process outlined in section 7.
- If during technology research, development, prototyping, testing and / or demonstration Participants cannot provide data and information for agreed upon data elements because there was no data or information generated matching the particular data element, and/or a particular data element becomes Intellectual Property or a trade secret, APMA will work with Participants to provide a written justification to OCI. OCI shall review the justification and may allow for an exception.
- APMA shall work with Participants to gather, assemble and compile all corresponding, non-proprietary data and information elements from the list of elements described in the DISP, and report it to OCI over the duration outlined in the Agreement.
- APMA shall work with Participants to ensure that data and information reported is true, accurate, complete and updated.
- APMA shall ensure that Participants who receive support to research, develop, prototype, test and / or demonstrate technologies through, or as a result of, Project funding are contractually obligated to provide the reporting requirements indicated in the DISP.
- APMA shall ensure that Participants report at a minimum annually, in accordance with the terms of the Agreement between OCI and APMA.
- APMA acknowledges and agrees that Participants failing to provide the reporting requirements indicated in section 7 of this Schedule and the DISP may result in the termination, suspension or revocation of OCI's obligations and payments described in the Agreement.

6. Data Management and Security

- OCI will store all collected data and information on a secure server that is aligned with Shared Services Canada protocols.
- All collected data and information will be password protected.
- Access to collected data and information in its raw format, except for the project performance data listed in the DISP, will be limited to OCI staff directly involved in the OVIN, unless otherwise specified by the data and information owner.
- Project performance may be shared with other organizations and in accordance with the OCI's privacy policy¹ and the Agreement between Ontario and OCI.
- No person, organization, specific product or service will be singled out or identified in any public reporting, unless approval is obtained from this person or organization and in accordance with the OCI's privacy policy (<http://www.OC-innovation.ca/privacy-policy>).

NOTE: Reported data and information is the sole responsibility of the entity that makes them available. OCI will not be liable for false data or misrepresentation of the data. Additionally, OCI and Ontario will not be liable for any loss or damage that result from the reporting process.

NOTE: Participants will retain full ownership of the data and information provided to OCI.

7. Process to Amend Data and Information Sharing Requirements

Prior to signing agreements with Participants, APMA shall work with Participants who request to amend the list of required data and information specified in the DISP to reflect their specific project design and business needs.

APMA shall work with Participants who must identify information they cannot report due to their project not generating that specific data or concerns around the proprietary nature of the data, and provide a sufficient justification of why the identified information cannot be reported. OCI will review the amendment requests on a case-by-case basis, and, if applicable, modify the requirements for the specific Participant to minimize the effect of the missing information on the overall quality of the collected data. Approved changes have to be included in the relevant funding agreements between Participants and APMA.

NOTE: We advise that Ontario Centre of Innovation ("OCI") is not an institution for the purposes of the Freedom of Information and Protection Of Privacy Act (Ontario) ("FIPPA"). As a result, OCI is not subject to the provisions of FIPPA, including its freedom of information provisions. OCI may furnish data and information to Ontario which is subject to the FIPPA.

OCI is a not-for-profit corporation with a mandate to support the commercialization of technology for the benefit of Ontario. OCI works closely with its funders, including the Government of Ontario, to ensure its mandate is carried out in an efficient, effective and fair manner.

¹ <http://www.OC-innovation.ca/privacy-policy>

OCI also carries out its mandate with openness and transparency. OCI-supported projects are listed in the “Our projects” section of the OCI website at <https://www.oc-innovation.ca/projects/> , along with comprehensive information about each project. This information may be accessed by the public in a manner that is searchable by category, program, company name, academic institution and sector.

At the same time, OCI respects the privacy of individuals and the personal information OCI collects about them. For information on our privacy practices, please visit <http://www.OC-innovation.ca/privacy-policy>.

8. Protocol Updates

On an annual basis, OCI will review and consult with the automotive and mobility ecosystem to ensure that the Protocol is up-to-date and captures all relevant data and information that is of interest to members of the automotive and mobility ecosystem. Any changes proposed as a result of the review and consultation will be subject to approval.

Appendix: Reporting Requirements for Project Arrow 2.0

The following table specifies the data and information types and elements required to be reported to OCI by Project Arrow's participants and partners. Reporting requirements are designed to adapt to the different types of technologies developed within the ecosystem and the maturity level of each technology / product / service.

- **Project Arrow** – Led by the Automotive Parts Manufacturers Association (APMA), in partnership with OVIN, Project Arrow is the first all-Canadian, zero-emission vehicle (ZEV) that will be designed, engineered, and built through the joint efforts of our world-class automotive supply sector and post-secondary institutions. Through development of the prototype vehicle, Project Arrow will provide a platform to enable collaborations with Ontario-based SMEs, demonstrating Ontario's and Canada's automotive capabilities and innovation.

Reporting this information to OVIN does not supersede or replace any regulatory reporting requirements to the Government of Ontario that the partner or participant may have. In particular, program partners and participants are still required to comply with Ontario Regulation 306/15 made under the Highway Traffic Act² and all other reporting requirements, as applicable.

² <https://www.ontario.ca/laws/regulation/r15306>

Project Arrow 2.0

Program Performance Data	
Expected Analytical Outcome: <ul style="list-style-type: none"> • Measure economic benefits to the Province 	
Reporting Frequency: <p>For each SME technology integration: DISP Registration – once Economic Survey – once Technical Survey – once</p> <p>For APMA: Provide the data below, <u>specific to Ontario</u>, twice per year as part of the reporting requirements outlined in Schedule “E” of the funding agreement.</p>	
Reporting requirements	<ul style="list-style-type: none"> • APMA Metrics: <ul style="list-style-type: none"> ○ Number of requests to use the production run facility of Project Arrow 2.0 ○ Number of companies using the production run facility of Project Arrow 2.0 to demonstrate technology ○ Number of companies expressing interest to view or purchase the Project Arrow 2.0 technology ○ Number of companies visiting the Production Run Facility to view or purchase technology ○ Number of partnerships formed in the current reporting period ○ Number of collaborations formed in the current reporting period ○ Number of visits by members of the public and / or media at the Project Arrow production run facility ○ Number of, within Canada, trade shows where Project Arrow technology was demonstrated ○ Number of, international, trade shows where Project Arrow technology was demonstrated ○ Media tags • Participant Metrics <ul style="list-style-type: none"> ○ Number of new products, services, or processes commercialized ○ Number of prototypes developed or launched ○ Number of patents filed resulting from program

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| | <ul style="list-style-type: none"> ○ Number of licensing of technologies resulting from program ○ Number of jobs created ○ Number of jobs retained ○ Number of forecasted jobs created by project completion ○ Value of international exports ○ Value of follow-on investment received ○ Value of incremental sales (in Canada and internationally) |
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Project Arrow Characteristics

Expected Analytical outcomes:

- Identify future needs of Project Arrow 2.0 for displaying the effectiveness of Ontario developed technologies / products through OVIN.
- List of equipment installations required to develop and demonstrate made-in-Ontario technologies / products including a description of the equipment and purpose.
- List of infrastructure / field equipment features and capabilities that have been valuable to develop and demonstrate made-in-Ontario technologies / products including a description of the feature / capability and how it is utilized by the developed / demonstrated technologies.

Technology / Product / Service Characteristics and Performance Data

Expected Analytical outcomes:

- Provide information about technologies / products / services developed within the program participation / use, the capabilities of these technologies / products / services, and potential uses / applications.

- Identify potential risks associated with technology / product / service deployment to support making informed decisions about how to manage or avoid these risks.
- Identify possible adoption scenarios and highlight the potential applications of the new technologies developed within the automotive and mobility ecosystem.
- Identify policies and regulations that could be changed to accelerate the adoption of the future automotive and mobility technologies, and hence, maintain Ontario's position as a global leader in this space.
- Identify barriers and enablers to future automotive and mobility technologies and products, and potential improvements to processes and business models adopted within the automotive and mobility ecosystem.
- Inform transportation and/or mobility authorities of infrastructural changes and design features that could be considered to support the adoption of future mobility technologies.
- Provide information / statistics about developed / demonstrated technologies, their uses, functionalities, and characteristics.
- Provide information / statistics about the strengths and abilities of Project Arrow.

Reporting requirements for all engagements

Common Technology Classification Requirements

- Type and core functionalities of technology, product, or service being researched or developed (e.g., collision avoidance system, obstacle detection system, positioning and navigation system, vehicle electrification system)
- Stage of technology, product, or service development and its market readiness (e.g., design, testing, demonstration, and deployment)
- If applicable, targeted SAE level of automation supported by the technology, product, or service
- If applicable, targeted type of communication supported by the technology, product, or service
- Types of vehicle and/or infrastructure supported
- Targeted vehicle service (i.e., passenger vs. commercial vehicle service)

Proof of Concept / Design Phases

- All data elements outlined in the common technology classification requirements
- If applicable, safety considerations and requirements for the safe use of technology, product, or service
- Infrastructure features / systems required to support the deployment of product, technology, or service

- All external data and communication requirements
- If applicable, other external requirements for the technology, product, or service operation including special mechanical and electrical requirements
- Expected impacts of using the designed technology, product, or service including: 1) Safety impacts (e.g., reduced number of accidents); 2) Mobility Impacts (e.g., reduced travel time and increased accessibility); and 3) Environmental Impacts (e.g., reduced CO2 emissions)
- Identified technological, regulatory, cost, and / or social enablers and barriers
- Any additional research- / design-related information that could be beneficial to the OVIN ecosystem

Development Phase

- All data elements outlined in proof of concept and design phases
- Pace of development and anticipated release dates
- Any additional development-related information that could be beneficial to the OVIN ecosystem

Evaluation / Demonstration / Productization Phases

- All data elements outlined in proof of concept, design, and development phases
- Plans after support from OVIN comes to an end
- Anticipated availability to market
- Public acceptance and interaction considerations for technology / service adoption
- Any additional evaluation- / demonstration- / productization-related information that could be beneficial to the OVIN ecosystem

Deployment Phase

- All data elements outlined in all previous phases
- Deployment / offering locations and markets
- Purchase / use price of technology, product, or service
- Technology, product, or service marketing channels, if applicable
- Any additional deployment-related information that could be beneficial to the OVIN ecosystem