Integrated Farm Planning Accelerator fund Application form

Prior to completing this application, please read the IFP Accelerator fund Guideline for applicants

Integrate	d farm
planning	overview

Integrated farm planning is an approach that brings together different aspects of existing farm or whenua management, planning and reporting responsibilities. This could include, for example, integrating elements of a business's farm environment plan, freshwater farm plan, business plan and health and safety plan among others.

HOW TO APPLY

- Applications should be emailed to IFPAcceleratorfund@mpi.govt.nz or mailed to MPI's address below
- All applications must be received by 5 pm Wednesday 25 May 2022
- If you are making an expression of interest for Phase Two funding, please use the EOI form

1.0 APPLICANT DETAILS	COLL
1.1 Name of applicant group	TRUST ALLIANCE NZ INCORPORATED
1.2 Type of legal entity (drop-down menu)	Choose a legal Incorporated Society entity
1.3 NZBN	9429049549539
1.4 Postal address	Connected Accountants L1, South British Building, 326 Lambton Quay, Wellington 6142
1.5 Post code	6142
1.6 Region	Wellington

2.0 PRIMARY CONTACT	
2.1 Name of contact person	Klaeri Schelhowe
2.2 Project role	Executive Director
2.3 Organisation	TRUST ALLIANCE NZ INCORPORATED
2.4 Phone number	s 9(2)(a)
2.5 Email address	s 9(2)(a)

w
Digital enablement of data-sharing on-farm
Two years
Start date: 15th July 2022 End date: 31 August 2024
The problem Farmers and growers are burdened with duplication of effort and high costs for perceived non-value-added work, such as reporting the same data elements e.g., paddock location, crop data and providing evidence to meet requirements across multiple data silos pre- and post- the farm gate. This inefficiency, data redundancy and unnecessary admin work is a significant obstacle to the effective and efficient preparation and management of Farm Environment Plans (FEP). Also, and importantly, there is a lack of trust by the farmer in the security of the data and its use between software platforms and release to third parties such as regional councils. The issue is shown clearly in this quote from the recently released TANZ report ¹ "Production-wise the xx system does not do staff, it does not do HR, it does not do livestock, but it is really good at chemicals, xxx is quite good for stock movement and some H&S, but it's useless at crops and paddock recording, but it won't talk to xxxx. Nothing talks to anything else." Māori agribusiness A trusted digital identity provided with a farm enterprise wallet will integrate elements of a farm enterprise's environment, freshwater, business and health and safety plans across the software platforms farmers use s 9(2)(b)(ii)
issuers. Users can manage and control their own digital identity without depending on a service provider or intermediary. In simpler words, you control your own data, and no other party can withhold your own data from you. The level of need - All farming enterprises will ultimately be providing FEPs (and other reporting) as part of their legal requirements, licence to operate, market access and market/consumer requirements. The extent of the problem and level of need will be further informed by the digital Farm Environment Plan (dFEP) research project being led by TANZ (co-funded by MPI SFF Futures fund, more detail is in Section 4.4). This is a research project to get feedback from

¹ Trust Alliance New Zealand STAKEHOLDER ENGAGEMENT: DIGITAL FARM ENVIRONMENT PLANS Draft Report | May 2022

Ministry for Primary Industries

IFP Accelerator fund — Application form

Aim - To make a dFEP a value-added exercise for farmers through data interoperability between current software platforms and digital automation. This will reduce data entry, compliance costs, provide trust/evidence, promote better environmental outcomes and improve efficiency. Importantly, this will be achieved with enhanced data sovereignty under the control of the farm enterprise. The aim is that farmers/growers:

- Register once and enter data once
- Can share, manage and control individual data sets between different software systems and are also able to share data (as the owner/holder) with other parties without the need for any 3rd parties mediating the process.
- Have data self-sovereignty and control

The approach is to have the farm digital wallet rolled out to farmers directly. The wallet can also be distributed as a white-labelled product for use by current farm software providers $^{s\ 9(2)(b)(ii)}$. This will be done by TANZ establishing a prototype digital wallet for farm businesses for permissioned sharing of information across software platforms on-farm (also see **Attachment 1**). The project will provide tools, protocols and infrastructure to issue, manage decentralised Identifiers and verifiable credentials by the sector.

TANZ will work with collaborators s 9(2)(b)(ii)
to identify cohorts of early adopter farmers/growers. These cohorts s 9(2)(J)
are using a range of on-farm software platforms and TANZ will work with the software platform providers to establish interoperability across platforms. This will have two components:

- 1. Before the farm-gate within a farm enterprise the digital wallet will enable farmer permissioned sharing across software platforms. For example, the sharing of geospatial location for identifying farm boundaries and paddock locations so that this is consistent and avoids duplication. TANZ will work with the providers of the current platforms to agree the technical requirements of the digital wallet and engage them in the prototype development. Alternatively, the digital wallet will / can be implemented directly with farmers as well. Both ways of implementation will be covered.
- 2. After farm-gate the digital wallet will be developed and trialled for use with third parties that need access to dFEP plans/data for regulatory purposes e.g., regional councils and IVA's This would maintain the farmer's data sovereignty and permissioning.

The outcome is that the farmer will be able to manage/share and control individual data sets on farm and for 3rd parties for different purpose (such as buyers, MPI, MfE, Regional Councils).

A critical part of the approach is ensuring that the solution used for the digital farm wallet is:

- Readily scalable to be able to reach all farmers and other stakeholders/parties that want to adopt the technology
- Flexible to be able to be integrated with wide range of software platforms, and
- Portable For example able to be used across industries, sectors and potentially borders.
- Based upon recognised global technical standards for easy interoperability.

eleased

This will not be a new digital planning tool. Building on a body of work underway with MPI, TANZ, s 9(2)(b)(ii) and others in this project will enable secure data sharing across software platforms for dFEP planning. This will enable farmers/growers to get ready for Integrated National Farm Data Platform (INFDP), HWEN and Certified Freshwater Farm Plan etc. Additionally, it will provide the opportunity to use a dFEP for other purpose such as access to sustainable finance² and support a volume-to-value strategy. s 9(2)(j) Success would be the farm enterprise wallet adopted/embedded and deployed by current 3.5 Project outcomes solution providers for up to s 9(2)(j) farmers/growers, who: Describe what success Register ONCE, get a Digital Identity for the farm enterprise based on the DIA's will look like and what will change/improve as Service Trust Framework legislation bill. a result of your project. Capture data ONCE. Successfully using the protype digital wallet to manage on-farm software interoperability for dFEP's and reporting time savings, efficiency and cost savings Successfully provide farm data to 3rd parties off-farm e.g., MfE, Regional Councils Report a high level of trust in the digital wallet and have the self-sovereignty model of data management recognised and adopted within the industry. 3.6 Outreach TANZ will work with member organisations to access farmers/growers, specifically: s 9(2)(b)(ii) Identify who you expect to work with on your project and how you will reach them. What geographical area will the project focus on? TANZ also has established wider relationships and networks with key stakeholders due to the dFEP SFF Futures project. s 9(2)(j)

² For example – see reference to potential role of TANZ in "Sustainable Agriculture Finance Initiative, Data Project Findings Paper" Toitū Tahua – Centre for Sustainable Finance. April 2022

³ Digital Identity Services Trust Framework Bill - New Zealand Parliament (www.parliament.nz)

⁴ Draft Long-term Insights Briefing on the future of business for Aotearoa New Zealand | Ministry of Business, Innovation & Employment (mbie.govt.nz)

3.7 Sector This will be further defined in the initial workstream of the project when initial cohorts of farmers are confirmed (see Section 3.8). Agritech NZ⁵ has completed analysis of the List the sector or sectors of the people current use of digital tools in the following sectors: you will be working with. Beef Dairy Sheep & Beef Sheep In a staged process TANZ will work with \$ 9(2)(j) 3.8 Number of farmers or growers over two years. participants This will be done via collaborators who have direct relationships with the farmers/growers. State how many The stages are: farmer/grower Stage 1 - s 9(2)(b)(ii) businesses your project has identified early adopter farmers/growers. s 9(2)(b)(ii) expects to work with. will facilitate access to his group and TANZ will work with both the farmer/growers and their on-farm software providers e.g., \$ 9(2)(6) Experience from this group will also inform Stage 2. Stage 2 – will reach s 9(2)(j) farmer/growers. This is based on the s 9(2)(j) As noted in the previous section these farmers/growers have been identified and chosen 3.9 Reason for choosing these as early adopters and are currently using a range of on-farm software platforms. To implement the digital wallet TANZ prefers to work with the third-party software providers participants s 9(2)(b)(ii) State why you have as well as the farmers. chosen to work with Demonstrating the utility of the digital wallet for interoperability for a significant cohort of these particular farmers and growers. early adopters and their technology providers will provide a strong basis for further adoption. 3.10 Collaborations Name the entities (if any) that you will be collaborating with to deliver this project.

⁵ Baselining Primary Sector Digital Adoption - AgriTech New Zealand (agritechnz.org.nz)

	s 9(2)(b)(ii)
3.11 Measuring success How will you measure progress and success?	Success measures are outlined below, these will be further refined and finalised in Workstream 1. 1. Most early adopters identified by \$\frac{9}{2}(j)\$, \$\frac{9}{2}(j)\$, \$\frac{9}{2}(j)\$, \$\frac{9}{2}(j)\$, will participate in Year 1. Success on-farm would be measured by: a. The farm enterprises using a prototype wallet and a digital identity to share information across software platforms on farm for development/management of a dFEP b. Data only entered once across the software platform, giving a measurable reduction in admin time for the farm enterprise. c. The level of trust in the system and reported time savings d. Successful engagement by TANZ with the current platform providers for onfarm use \$\frac{9}{2}(2)(b)(ii)\$ 2. Roll out of a prototype to a group of \$\frac{9}{2}(2)(1)\$ farmers/growers by the end of Year 2 with measures based on a), b), c) above. 3. The same dFEP data will be provided directly by farmers using the digital wallet to relevant regional councils via INFDP \$\frac{9}{2}(2)(b)(ii)\$ to meet their reporting/audit requirements 4. \$\frac{9}{2}(2)(1)\$

Released under the

4.0 PROJECT FUNDING

4.1 Estimated total project cost and funding framework

Released under the Official Information Act 1987

s 9(2)(j)

Ministry for Primary Industries

IFP Accelerator fund – Application form

4.3 Why is government funding needed?

s 9(2)(j)

Describe what support from the IFP
Accelerator fund will enable you to do that you wouldn't be able to do otherwise? What additional outcomes will be achieved compared to what you would achieve without MPI funding?

4.4 Has funding from any other government source been received or applied for in relation to this project?

5.0 PROJECT DELIVERY

5.1 How will you go about delivering the project?

Describe the activities that will be completed during the project.

Explain why you think this approach will be successful.

The four workstreams and the related activities are detailed below. The timing of Workstreams is shown in **Attachment 2**.

Workstream 1 - Finalising requirements, analysis, and design phase

Activities

The focus is on finalising and roll-out with integrators the existing MVP components s 9(2)(j)

 Complete feasibility analysis. This will include identifying, defining and finalising the requirements to deploy the tools and protocols by TANZ

- A stakeholder engagement plan developed and agreed
- Carry out a benchmark evaluation of possible technical deployment solutions and additional features such as management, revoke, control of Digital Identity.
 Identify the pros and cons and make recommendations on appropriate solutions and features.
- Evaluation of development of a farm digital identity decentralised registry
- Ongoing review over the course of the project

Who - Technical workgroup and international tech stack experts, TANZ engineering team and potential technology component providers.

Workstream 2 - Evaluate, develop, adopt phase

Activities

- Finalise requirements to deploy the provided tools and protocols by TANZ
- Engage initial cohort of early adopters and their software providers and determine their pre-farm gate requirements
- Work with software providers to agree/develop farm identification, registration and permissions for digital identity/wallet
- Field MVP roll out with up to early adopters and evaluate uptake and acceptance
- Evaluate and addressing feedback for further roll-out
- Identify requirements of receiving groups outside the farm gate e.g., regional council, INFDP, N-cap reporting tool
- Field test MVP with receiving groups outside the farm gate

Who – TANZ, ^{s 9(2)(b)(ii)} Tech working group with TANZ members (and non-TANZ members)

Workstream 3-Test and implementation phase

Activities

- Contact and engage larger cohort s 9(2)(j) of early adopters for roll out of MVP/prototype. This will be done by working with other TANZ members. TANZ will resource this and contract a provider s 9(2) (b)(ii) for communications and provision of a field and call-centre team.
- Engagement with on-farm software providers for this cohort if the providers were not involved in Workstream 2.
- Prepare initial technical education and communication resources for outreach to farmers and service providers.
- Agree a plan for roll-out to this cohort by sector and region
- Start MVP/prototype roll out by the agreed sectors and regions and provide support to both farmers/growers and software providers.
- Ongoing evaluation of uptake, feedback and acceptance.
- Evaluate and addressing feedback for further roll-out

Who – TANZ, ^{s 9(2)(b)(ii)} 3rd party solution and integration service providers (TANZ members and non-TANZ members)

eleasedu

Workstream 4 - Transformation (to be concurrent with all the above workstreams)

Activities

Awareness, education and change management. This will be done in three stages with a comprehensive plan that encompasses the following:

- Preparing for Change
 - Stakeholder assessment
 - Risk assessment
 - o Change leadership and governance
 - Resources to manage the change
- Managing the Change
 - Building support and engagement
 - Business readiness assessment
 - Transition plan
 - Communications plan
 - Feedback and assurance plan
- Sustaining the Change
 - Measuring the change
 - Managing resistance
 - Evaluation and learning

s 9(2)(j)

Specific activities would include:

- Engagement of a Transformation Manager with an appropriate skill set in technology and change management to lead the development of a detailed plan and manage its implementation. They will report via the Project Manager to the Project Steering Group.
- A programme of awareness, education and change management will be developed aimed at the farmer, on-farm software and integration communities.
 This will be done by a number of channels/media e.g. Farmers Weekly and using trusted and existing partners.
- Engagement with regional farming communities will use existing groupings e.g., catchment groups, facilitated where possible by sector organisations such as Beef & Lamb or Dairy NZ.
- Workshops and training by sector and region as appropriate to inform and showcase the advantages of a digital wallet for dFEP.
- Providing a stage to discuss and engage within Data Reference Group and Geospatial Working Group (both led by ^{s 9(2)(b)(ii)}).
- Collaboration and active involvement at Data Interoperability Working Group cross sector (led by Isaac Trienen, MPI).
- Engagement with other relevant initiatives who will use farm registration service.

eleased

Who TANZ, s 9(2)(b)(ii)

TANZ believes this approach will be successful because:

- Through their membership and other relationships, they have the reach to connect with a key group of early adopters (both farmers/growers and software providers and integrators)
- TANZ recognises that a key challenge is working with farmers/growers to get an appropriate level of understanding of the technology. TANZ will put significant resource into this both directly and via its members.
- TANZ is seen as a trusted intermediary organisation with the skill set and connections to bring such a project together, without any ulterior commercial motives.

5.2 Resources

Explain what resources are needed to deliver the project and how your organisation and/or partners can provide these.

s 9(2)(j)

5.3 Experience

Describe your experience in delivering extension programmes such as this.

The extension required in this project is to both farmers/growers and on-farm software providers.

- Extension to farmers/growers will be managed in collaboration with collaborators
 who have deep expertise in extension and/or have direct and trusted links to
 farmers/growers e.g. § 9(2)(b)(ii)
- Through its membership and leadership TANZ can work with the on-farm software providers and has a track record of doing this s 9(2)(b)(ii), s 9(2)(j)

5.4 Project oversight

Describe project management and governance arrangements.

Governance

A project steering group (PSG) will provide project governance. The PSG will have a maximum of 5 members comprising two TANZ Board members, one s 9(2)(b) representative and a farmer/grower representative.

TANZ will agree the final make-up of the PSG with MPI. The PSG will meet no less that quarterly and will approve the annual plan and budget and MPI Milestone reports. The PSG Chair will be Chris Claridge (Chair of TANZ and CEO of Potatoes New Zealand Inc).

The Project Lead will be Klaeri Schelhowe (TANZ Executive Director) who will report to the PSG.

A suitably qualified and experienced Project Manager will be contracted for the duration of the project and will report to the Project Lead.

6.0 PROJECT RISKS

List the top 5 potential risks and how you will mitigate those risks. Describe risks and impacts using IF and THEN

statements. **Project risk** Mitigation eleased under the official s 9(2)(j)

⁷ General Data Protection Regulation (GDPR) Compliance Guidelines

⁸ World Wide Web Consortium (W3C)

7.0 HEALTH AND SAFETY RISKS

List the top 5 health and safety **risks** and how you will **mitigate** those risks.

Health and safety risk	Mitigation
TANZ will be contracting with several entities and/or individuals for a range of services	All contractors work will have their own H&S management and systems in place in accordance with TANZ policies.
	K 3

DECLARATION

(Please tick boxes)

- ☑ I declare that I am authorised to make this application on behalf of the legal entity identified in the
- ☑ I declare that, to the best of my knowledge, the information contained in this application or supplied in support of it is complete, true and accurate.
- ☑ I understand that the information contained in this application will remain confidential throughout MPI's assessment process.
- ☑ I consent to MPI using the content provided in the application project summary when announcing approved projects, should the application be approved for funding.
- ☑ I consent to MPI publicising success stories about the project in the future should the application proceed to a contract.
- ☑ I acknowledge that MPI may be required to share information under the Official Information Act (OIA) if requested.
- ☑ I acknowledge that, if successful in securing a funding contract, the legal entity for this application will need to comply with obligations under the Health and Safety at Work (HSW) Act 2015.

Name:	Klaeri Schelhowe
Title / Position:	Executive Director
Date:	25.05.22

If more than one signature is required, please copy and paste additional signature boxes here.

Submitting your application

- Applications should be emailed to IFPAcceleratorfund@mpi.govt.nz or mailed to MPI's address below
- All applications by email must be received by 5 pm Wednesday 25 May 2022
- All applications by mail must be post marked no later than 5 pm Wednesday 25 May 2022

Hard copy applications can be mailed to:

Integrated Farm Planning Accelerator fund Ministry for Primary Industries PO Box 2526 Wellington

Attn: Community Funds

If you have any questions or require assistance with your application, please email IFPAcceleratorfund@mpi.govt.nz

Attachments

Attachment 1



Attachment 2 – Indicative workstream timing and relationship to connected projects Assumes a July 1, 2022, start date and 2-year duration. Actual timing will depend on the completion

		r duration. Actual timing will depend on the completion of cont Year 1				Year 2			
		Q1 July - Sept	Q2 Oct - Dec	Q3 Jan - Mar	Q4 Apr - June	Q1 July - Sept	Q2 Oct - Dec	Q3 Jan - Mar	Q4 Apr - June
workstreams	W 1 - Finalising requirements, analysis, and design	Focus is in initial 6 months		Carries on to continually review, design, develop more functionalities and features of the technology stack/solutions					
	W 2 - Evaluate, develop, adopt	Initial cohort of 160 early adopters.				Continues to evaluate & develop with initial cohort			
	W 3 - Test and implementation				401	Larger cohort (1,	600+) of early ado	pters for roll out o	f prototype
	W 4 - Transformation					ness/education and change management with farmer, software tegration communities.			
Related work			() -()	Offici?					
		Jund	Stille						
		dull b.							