TOOLBOX AQUACULTURE

Guidance for developing an E-Licensing System Tool

This project has received funding from the EU H2020 research and innovation programme under Grant Agreement No 678396

E-Licensing tool

An electronic licensing system is a set of computer-based tools and services that automate and streamline the licence application process. The intent of electronic application is to reduce processing time, improve customer service, increase efficiency and enhance quality. An electronic application system would replace the traditional paper systems.

This guidance document outlines:

- Benefits of E-Licensing – outlining the impacts that a proficient E-Licensing system would provide
- Development of an E-Licensing tool - the stages in the development of a tool
- E-Licensing tools – guidance on what should be provided for by an E-Licensing tool. Tools have been described based on different levels of functionality:
    - Basic
    - Multi-use e-licensing system
    - Fully integrated management systems

Benefits of an electronic application process

Each jurisdiction should provide an electronic licensing application system to meet their individual needs, using best practise from across jurisdictions. An electronic system can be as simple as a single software tool for collection of the applicant's data and for tracking the progress of the application, up to a complex version which could contain a broad array of task-specific tools integrated into a system.

An electronic application system can provide a broad range of benefits. The advantages of an electronic system would include:

- All users can view the progress of an application in real time
    - Workflow and tracking that reviews plans and approves applications more quickly
- Single point of reference for applicants, decision makers and regulators
    - Reduced duplication with availability of shared resources

This project has received funding from the EU H2020 research and innovation programme under Grant Agreement No 678396

    - Data required by decision makers in one accessible area
- Improved record keeping and reliable archiving of permitting activities
- One-stop-shop for all guidelines and guidance materials, forms, contacts, templates and associated legislation for those participating in aquaculture activities
- Single point of contact and single-entry location for data to an application where it can then be accessed by all involved in decision making
    - Application portal with reminder/warning regarding 'incomplete' applications
- Enhanced communication between applicant and regulator that produces higher quality plan submissions and reviews, permit applications, and customer service
    - Automatic notifications for all users regarding the progress of application
- The facilitation of concurrent consultation periods
- Embedded or linked tools to assist with mapping and site identification standardising mapping & drawing guidelines
- A list of frequently asked questions or user-friendly tips.

Developing an electronic application process

Developing an electronic system is recommended through the following steps:

1. Project Team
    - Define a team with the expertise to design the system
    - Address the issues and bottlenecks identified by the team, before designing
2. Review and Design
    - Review the current system
    - Identify the steps/stages needed in the new system
    - Identify the issues and bottlenecks
    - Design the new framework taking into account, regulatory constraints, policy future changes
3. Develop and Trial
    - Design the new system
    - Get feedback on design form all stakeholders
    - Implement the feedback
    - Build a draft system and detailed user guides to accompany new approach
    - Trial the proposed system ensuring optimal stakeholder engagement
    - Incorporate feedback throughout to ground truth the new approach
4. Upload and Pilot
    - Implement a pilot version

This project has received funding from the EU H2020 research and innovation programme under Grant Agreement No 678396

- Trial this version mirroring real scenarios
- Incorporate any changes required

5. Commissioning
    - Commission final version
    - Including provision to evaluate the new system
    - Evaluate after 3 months
    - Conduct regular evaluations and updates, particularly in the early stages.
    - Have a regular evaluation and update schedule

E-Licensing tools

As a tool, an effective E-Licensing portal will enable all users to utilise better time management in processing an application. Decision makers will have all necessary data required in one accessible area, removing the stop-start nature that often accompanies 'incomplete' applications. An effective E-licensing system can include access to relevant maps and models, combining elements of:

- Site identification and mapping,
- MSP, zonal and licences mapping,
- Environmental mapping,
- Spatial mapping highlighting conservation areas and,
- Maps highlighting current uses of a resource.

The system can act as a point of contact for applicants and single point of reference for decision makers and regulators. All systems should be co-ordinated by a single licensing body with password protected access for users. Users can have differing permissions and access levels to the system and the information depending on their categorisation, allowing inputs to the system from various parties while restricting access to the information one sees to appropriate permission levels. Any system needs to be securely protected to ensure the integrity of the information and data, with confidentiality of information assured and access restricted to appropriate levels.

The components of an e-licensing system are outlined in this section. Based on their functionality and usage, the systems are outlined as *Basic*, *Multi-use*, and *Fully integrated* systems.

A summary of the different tools and what functionality they contain can be found in the following table.

This project has received funding from the EU H2020 research and innovation programme under Grant Agreement No 678396

	System specifications	Basic	Multi-use	Fully Integrated
System design	Co-ordinated by a single licensing body	✓	✓	✓
	Password protected access for users	✓	✓	✓
	Varying user access levels	✓	✓	✓
	Allow inputs to the system	✓	✓	✓
	Secure protection and confidentiality assurance. Restricted access levels.	✓	✓	✓
	Outlining the determination process and timelines in a detailed and transparent manner	✓	✓	✓
	Multiple user access and the ability to share information to individuals or organisations and/or the public as appropriate		✓	✓
Application	Clear details of the necessary components and steps that are required for an application	✓	✓	✓
	The ability to apply through an electronic portal	✓	✓	✓
	The ability to highlight any missing components during the submission process	✓	✓	✓
	Applications received electronically and centrally stored	✓	✓	✓
	Tracking software coordinating tasks and communicating directly with the applicant on the progression of the application	✓	✓	✓
	A guideline indication of the expected timeline for advancement of an application	✓	✓	✓
	The ability to produce a publicly accessible electronic licence		✓	✓
	Fees determined/notified automatically & link to accounts for processing payments & receipt			✓
Communication	The ability for all parties to follow the progression of the application	✓	✓	✓
	Push commands to inform users of level of progression		✓	✓
	Communications platform from file manager to decision making body for reminders, approvals needed and required actions	✓	✓	✓
	Communications platforms for dialogue between the applicant and the regulator	✓	✓	✓
	A process management system for all users involved in the decision making		✓	✓
	Inter- and intra-agency communication tools		✓	✓

This project has received funding from the EU H2020 research and innovation programme under Grant Agreement No 678396

	Flexible reporting capabilities that document the work progression		✓	✓
	Automatic renewal notices (push alerts) - alert operators			✓
	Querying database for reporting			✓
Tools	Guidance documents to assist with the planning and application process	✓	✓	✓
	A repository of data, examples and guidelines to assist users in constructing their application	✓	✓	✓
	Standardised electronic site identification technology		✓	✓
	Internal management tools for gauging efficiency and identifying problems		✓	✓
	A repository of the documentation and materials required for decision making		✓	✓
	Fee calculation and collection tools		✓	✓
	Site identification and mapping			✓
	Inclusion / embedded maps highlighting current uses of a resource			✓
	Environmental mapping			✓
	Spatial mapping highlighting conservation areas			✓
	Spatial planning, zonal and licences mapping			✓
	Application analysis software that helps reviewers compare documents with defined requirements, to flag problems, and to output reports			✓

This project has received funding from the EU H2020 research and innovation programme under Grant Agreement No 678396

Basic

At the most basic level an application is submitted through an electronic application portal. Tracking software places the application into a workflow program that channels information to consultees, helps coordinate the tasks, links the application to the history held in the database, and provides an effective way of communicating directly with the applicant on the progression of the application. Within the system applications can be reviewed, interrogated, annotated and shared among the relevant consultees and users.

A basic electronic application system should include:

- The ability to apply through an electronic portal.
- Applications received electronically and centrally stored.
- The ability to highlight any missing components during the submission process.
- The ability for all parties to follow the progression of the application.
- Communications platform from file manager to decision making body for reminders, approvals needed and required actions.
- Communications platforms for dialogue between the applicant and the regulator.
- Clear details of the necessary components and steps that are required for an application.
- A guideline indication of the expected timeline for advancement of an application.
- Outlining the determination process and timelines in a detailed and transparent manner.
- Guidance documents to assist with the planning and application process.
- A repository of data, examples and guidelines to assist users in constructing their application.

Multi-use e-licensing system

Elements that would be beneficial to incorporate in a more complex electronic system include:

- Multiple user access and the ability to share information to individuals or organisations and/or the public as appropriate.
- Inter- and intra-agency communication tools.
- Flexible reporting capabilities that document the work progression.
- A repository of the documentation and materials required for decision making.
- Fee calculation and collection tools.
- Standardised electronic site identification technology.
- A process management system for all users involved in the decision making.
- The ability to produce a publicly accessible electronic licence.
- Internal management tools for gauging efficiency and identifying problems.

Fully integrated management systems

An integrated application system is a sophisticated combination of hardware and software components incorporated into a system that seamlessly serves applicant, decision makers and consultees, coordinating and linking a broad range of activities such as, planning, risk

This project has received funding from the EU H2020 research and innovation programme under Grant Agreement No 678396

assessment, GIS services, etc. An advanced E-licensing system can include access to relevant maps and models, combining elements of:

- Site identification and mapping.
- Maps highlighting current uses of a resource.
- Environmental mapping.
- Spatial mapping highlighting conservation areas.
- Spatial planning, zonal and licences mapping.
- Application analysis software that helps reviewers compare documents with defined requirements, to flag problems, and to output reports.
- Automatic renewal notices - alert operators.
- Fees determined/notified automatically & link to accounts for processing payments & receipt.
- Querying database for reporting.

This project has received funding from the EU H2020 research and innovation programme under Grant Agreement No 678396