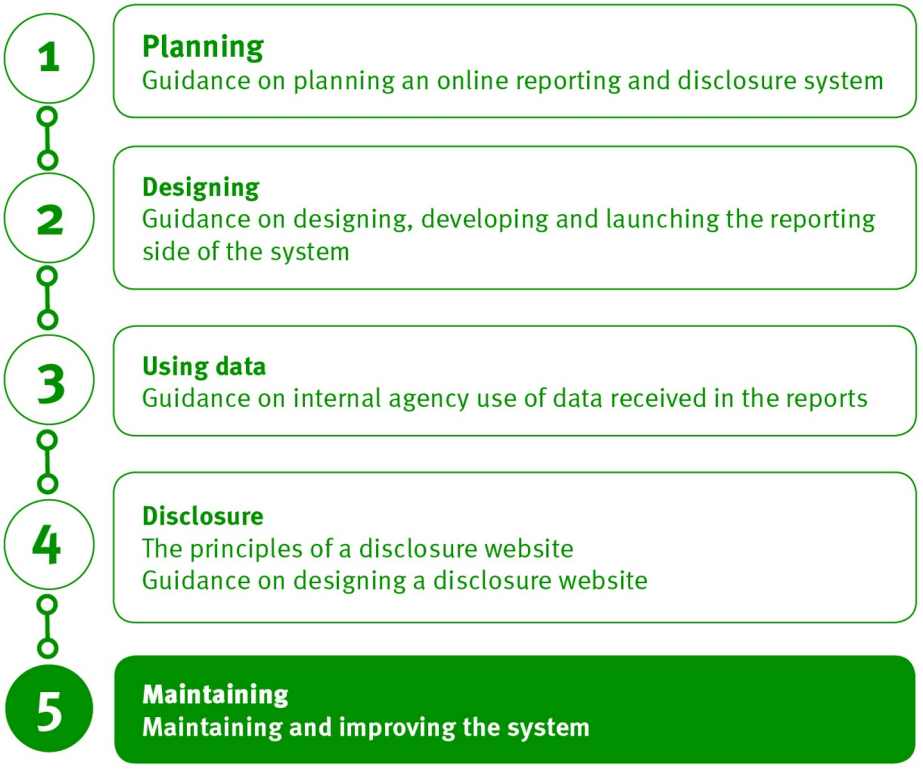
5. Maintaining and improving the system



The work and financial costs do not stop once the reporting and disclosure system is up and running. It will also require continual maintenance, periodic updating and eventual upgrading. Below are some reflections based on the experiences of other countries.

5.1. Maintenance

- Maintain a test version of the system. This should be an exact reproduction of the live system, including the same architecture, where bugs or new developments can be fixed or tested before being deployed.
- Any critical issues should be dealt with as part of a support contract with the system's developer and should be resolved as soon as possible.
- Notify users of any changes to the system or planned downtime. Put a note on the website at least a week before a system shutdown and ensure that this will not coincide with any deadlines or periods of heavy use.
- Review security threats regularly and put necessary safeguards in place.
- Keep browser compatibility in mind. Make sure the system and plug-ins can handle browser updates. In Australia, eReturns was not working for a large number of people at one point due to browser incompatibility after an external update of which the AEC was unaware.
- Dedicated staff will likely be necessary to run and maintain the system; the number of staff appointed varies between countries (see Table 5.1).

Table 5.1. Staff allocations for running and maintaining existing systems

Country	Number of staff working on the system
Canada	5 to 6 full-time employees
Colombia	1 full-time employee
Estonia	2 full-time employees
Finland	3 part-time employees
Georgia	2 full-time and 4 part-time employees
Norway	3 to 4 part-time employees
United Kingdom	1 full-time employee, 2 part-time employees who also provide support for other IT infrastructure and systems, and support from developers
United States	5 full-time contractors maintain, operate and upgrade the FEC's various IT systems; 1 full-time FEC employee who manages the eFiling reporting system

5.2. Improvement

- Solicit feedback from users of the system (e.g. feedback forms on the reporting and disclosure sites, or in person during training sessions), and use this to inform future revisions. Alternatively, an oversight agency could convene a meeting of users at specific junctures, such as post-election, to hear the experiences of political parties and candidates. Reviewing what worked (or did not work) can guide future improvements. For example, in Panama a special commission comprised of stakeholders is convened following each election and proposed reforms are then put to Congress.
- Use site traffic monitoring tools, such as Google Analytics, to improve the service by identifying users' behaviour on the site.

5.3. Upgrades

Incremental upgrades will be necessary throughout the life of the system. Although anticipating costs for upgrades can be difficult as many of the factors involved are unpredictable, some attempt should be made to budget for upgrades. Upgrades are unavoidable as a result of:

- functionality that was not included in the first phase, but was kept on hold for a later module;
- new functionality being identified;
- serious issue resolution;
- new or altered legislation (or interpretation of the legislation);
- changes to browser and other software requirements; or
- evolving security threats.

If the agency hosts the system internally, also consider regular hardware upgrades. When new versions of the UK and US disclosure websites were launched in 2015 and 2017, respectively, the agencies solicited input from all stakeholders in the redesign process. Beta sites were launched, and for a time these were run in parallel with the old sites. The FEC sought feedback on the beta site, including conducting interviews with users. It also drew on the skills of a government resource group to develop the new site in close consultation with the oversight agency.

Box 5.1. Upgrading the system in the United Kingdom

The UK's Electoral Commission launched the PEF Online system in March 2011. This was a single application providing both secure digital reporting and an online disclosure website. The system itself represented a great leap forward in terms of functionality, allowing for online reporting for the first time in the UK and providing a fully searchable database to the public. However, capability was prioritized at the expense of usability. As a result, the system lost users from both the online reporting side, choosing instead to continue to submit details on paper, and the disclosure side: users found the interface off-putting and would give up trying to find information themselves. In 2014, the Electoral Commission undertook a complete Agile redevelopment of the disclosure site and engaged users throughout the process. The resulting website provides access to the same data as the old site, but with much greater emphasis on the user's experience. The result has been increased usage of the site and positive feedback from general users and the press in particular.

5.4. Incorporating regulatory changes

If the system has been designed with flexibility in mind, hopefully it can incorporate any changes in political finance law or regulation relatively easily, without the need for any major redesign. Even so, an oversight agency will require some time to amend the system and test that everything still works as it should. The UK Electoral Commission allows itself 60 days to incorporate any such changes, while the US FEC has 90 days. As was mentioned in section 1, any regulatory changes should ideally be made with the online reporting system in mind and in consultation with the oversight agency.

Key considerations for maintaining and improving the system

- The system will require ongoing maintenance.
- Remember to include maintenance issues when planning and budgeting for the system.
- Security threats should be reviewed on a regular basis.
- Utilize feedback from users to improve reporting and disclosure sides of the system.
- Incremental upgrades will be necessary throughout the life of the system.