

# EWB NL ONLINE COLLABORATION PLATFORM

## USER REQUIREMENTS

### **About Engineers without Borders NL**

Our goal is to promote, teach and implement sustainable technical solutions in developing countries which can be successfully adopted by local companies. By doing so we believe we help to enhance people's quality of life and the development of communities.

We use the time of our engineers to improve life in developing countries by supporting local organizations, NGO's and entrepreneurs with our technical knowledge. All our projects are based on a local request and include a business/social model. In this way we realize a long-term and sustainable impact.

Example projects are drinking water systems, sustainable off-grid energy, development of smart apps or low-tech tools, set-up of small factories and enterprises. By participating in the projects, the engineers will develop non-technical knowledge such as how to deal with cultural differences, social impact, institutional models and entrepreneurship, which they also apply in their professional work.

No financial compensation is provided to board and advisory board members, other than compensation of personal travel cost and EWB-NL related expenses. All board and advisory board members work on a voluntary basis. Also engineers and support teams are not financially compensated for their efforts for EWB-NL. They contribute to our organisation and projects with their time and expertise.

See for more information about EWB and our projects [www.ewbnl.org](http://www.ewbnl.org)

### **Projects**

EWB executes projects that are based on a local request from a NGO, community or entrepreneur. They are the project owner, EWB supports with technical expertise. EWB uses structured procedure to come to a project, which starts with a request from the local partner and after co-writing of a project proposal and approval, a project team is set-up from the pool of engineers at EWB.

### **Issues**

There are several issues that we would like to solve by means of an online platform:

- At the moment there are far more engineers (140) which register than projects. Without promotion approx. 10 engineers register on a monthly basis.
- We are all volunteers and it takes a lot of time to match projects with people.

- There are various NGOs that have small technical questions that don't need the complete project request procedure but just a bit of consultancy from one of our engineers
- We need to work on the 'community feeling' of the EWB engineers, to make them feel part of our group from the beginning that they sign up with us.
- Contact information from the engineers is not up to date in our system

### **Solution**

The solution would be an online collaboration platform that matches the demand from NGO's to expertise from EWB, without any need for matchmaking. On the platform NGOs can post questions and challenges and the engineers that become member of the platform can reply to the questions and give advice.

### **Description of the platform**

The purpose of the platform is to connect NGOs with our engineers in an online platform linked to our website, and to allow NGOs to get feedback from our engineers in questions or issues that they are facing.

Therefore, the platform will allow NGOs to post technical questions, related to their projects or activities, and our engineers will be able to answer to them. We envision a forum-style or [Quora](#)-style platform to suit this purpose, where a conversation can be held around each question, and where engineers can share their contact details for further interaction with the NGOs, but other alternatives can be considered.

### **The three users of the platform are:**

- NGOs: they can pose questions to our community of engineers
- Engineers: they can answer questions and establish discussions with the NGOs around the topics these last ones propose
- Moderators/Administrators: they supervise the platform and check its content

### **The main elements conforming the platform are:**

1. A database of NGOs storing details such as contact email, contact person, NGO user name, field(s) of activiti(es)
2. A database of engineers storing details such as name, email, field(s) of expertise
3. A login system that gives access to the platform and is placed in our website
4. A secure database where the passwords and user names of the NGOs and the engineers are stored
5. A Quora-style or forum-style platform where NGOs can post threads with their questions and engineers can answer to them
6. A registration system for NGOs
7. A registration system for Engineers

### **Requirements:**

**Registration and login:**

1. The NGO registration system should allow an NGO to introduce their details and store the information in a database.
2. The Engineers registration system should allow an Engineer to introduce his/her details and store the information in a database.
3. Both databases in points 1 and 2 should allow for future modifications of the details, and removal from the database
4. The databases should be programmed in the language that is found more convenient, but it should be a commonly used one.
5. Once the registration of an NGO/Engineer is finished, a username and password should be assigned and stored in a separate, secure database
6. The registration process for NGOs should ask for the name of the NGO, contact person, contact email, field(s) of activity(ies), website (optional), desired username
7. The registration process for Engineers should ask for the name of the Engineer, contact email, phone, profile picture, field(s) of expertise, linkedIn profile link, about me (optional) and desired username
8. The username and password should be sent to the NGO/Engineer via email (after approval EWB admin)
9. The registration process should be 'bot-proof' to avoid bot-triggered registrations
10. The login system should ask for the username and the password of the user
11. Automatic remembering of the login details possibility
12. The login system should allow for a password recovery/resetting via the user email who requests it
13. The data and details of our registered NGOs should be protected/encrypted
14. The data and details of our registered engineers should be protected/encrypted

**Platform:**

15. The platform should allow for the publication of new threads (questions) as in Quora or similar, including:
  - Question in 1 sentence
  - Description, what is needed
  - When is it needed
  - Attachment or additional info
  - Contact person / info
16. Can there also be a 'I take this question' button that automatically sends the engineers profile to the NGO?
17. The platform should allow for answering to the question also as in Quora or similar, allowing for a discussion with multiple comments/answers
18. If an NGO is interested in a particular Engineer to help with its question, the NGO should be able to request a direct contact with the Engineer, and the Engineer should receive the request. If the Engineer authorises to give his details, the email of the engineer will be shared with and only with the NGO who requested it

19. The platform will consist of a main page where the last 10-20 questions by NGOs/threads are displayed, and by clicking on them it should redirect to the thread itself (similar than in Quora)
20. Admin account that can delete questions and comments
21. Match look and feel with website [www.ewbni.org](http://www.ewbni.org) , also see our styleguide
22. The platform should be intuitive and look engaging
23. From the main website we will create a link that redirects to a login page of the platform that will direct to the platform

#### **Nice to haves**

1. Location to share EWB templates and tools (stored at google drive), so all registered EWB engineers have access to these tools
2. Automatic cleaning of the page; after 6 months of no activity on a question, it will be archived. After 6 months of no activity, automatic email to NGO and Engineer with a reminder that the platform exists and we missed their presence.
3. It would be nice to state at the opening page 'to date xxx questions solved, xxx NGO's, xxx engineers' with the actual data

#### **Examples for which this would work**

- 1) Request from Red Cross to advise which type of pump they should use for an emergency aid WaSH (water and sanitation) application. They have some document with test results, some pump specifications. Approx 2 hrs work to give an advise and explain this to the Red Cross responsible person what could be the next steps. A possible follow-up project could be that they ask the engineer to go abroad for 2 weeks to support the testing.
- 2) Medicin sans Frontier has a design of an hospital that requires to be reviewed by an expert. They want to upload some document and select the best engineer for this job to send him/her the full design package.