The InaSAFE Realtime project

“Before we start training you to use InaSAFE Realtime, let’s make sure you understand the purpose of the software!”

The InaSAFE project ([http://inasafe.org](http://inasafe.org)) was started to provide a tool for disaster managers who want to understand what the potential impacts of a disaster will be. InaSAFE Realtime is software that is based on the same codebase as InaSAFE Desktop for the analysis part and a custom codebase that provides a web application. The purpose of the web application is to wait for events (Earthquake, Flood, Volcanic Ash) and then automatically process the hazard data from that event and produce a report using InaSAFE.

InaSAFE is supported by the Government of Australia, the World Bank / GFDRR and BNPB, the National Disaster Management Agency in Indonesia.
InaSAFE Realtime Timeline

http://realtime.inasafe.org

**Version 1**
2011/2012

- Developed by AIFDR/GA
- Based on GMT library, inflexible in terms of ability to change reporting outputs.

- Hosted by BNPB
- Funded by AIFDR

**Version 2**
Sep 2012

- Developed by Kartoza
- Based on QGIS and InaSAFE application platform.
- Modernised reporting and more flexible environment for report improvements using QGIS Composer. Publishing via simple event listing (non-searchable / not filtering etc.)

- Hosted by BNPB mirrored at AIFDR. Hosted by Kartoza after BNPB server decommissioned.
- Funded by WorldBank / GFDRR

**Version 3**
June 2015

- Developed by AIFDR/Kartoza
- Added query, filter, map view, map popups, distributed architecture, separated processing engine (docker + QGIS + InaSAFE) from web reporting engine (docker + django).
- Integration with InaWARE.

- Hosted by Kartoza.
- Funded by AIFDR

**Version 4**
Dec 2015

- Development by DMI/Kartoza
- Adding flood (Jakarta) support & landing page using PetaJakarta as data source. Added more robust backup scheme. Adding service monitoring. Ongoing support of existing system.

- Hosted by Kartoza thereafter.
- Funded by DMI/DFAT

**Version 5**
July 2016

- Development by DMI/Kartoza
- Added volcanic ash weight on landcover / places support & landing page using manual uploaded data as data source.

- Hosted by Kartoza.
- Funded by DMI/DFAT

**Version 6**
Aug 2017

- Development by DMI/Kartoza
- Updated orchestration to be deployable on Rancher.
- Sysadmin training for hosting at BNPB on servers donated by DFAT/DMI.
- Flood updated to use PetaBencana. Code based on InaSAFE 3.5

- Hosted by Kartoza.
- Funded by DMI/DFAT
You try:

**Goal: no exercise**

no exercise

**More about**

The InaSAFE Realtime project was started in 2011 and implemented as a simple proof of concept to show that we could produce near real-time reports on the estimated impact on population following an earthquake in the Indonesian territorial region.

Successive versions of InaSAFE Realtime have added support for additional hazard (flood in Jakarta, volcanic ash fall) and moved from a simple script that produces static files to a web application that stores a searchable database of previous events and publishes reports to InaWARE.

**The approach taken by InaSAFE Realtime**

**Near real-time:** Despite the name ‘realtime’ it would be more accurate to describe the system as ‘near realtime’. Our goal is to produce reports in a timely manner after or during an event but this relies on data availability and other factors that make it impossible to produce the report at the exact moment the event occurs.

**Open Source:** The software behind InaSAFE is Open Source, and can be freely viewed, downloaded, modified and adapted to your specific needs.

**Funding and Partners:** InaSAFE Realtime has been funded by the Australian Government, World Bank/GFDRR and has been developed in collaboration with partner agencies from the government of Indonesia: BNPB, BPBD DKI Jakarta, BMKG, BIG, PVMBG and with non governmental support from the Humanitarian OpenStreetMap Team (HOT), PetaBencana, the Pacific Disaster Centre and Kartoza.

**Usage context:** InaSAFE Realtime is intended to be used in the response and recovery phases of a disaster to increase situational awareness.

**Fitur Utama:**

- Dukungan untuk gempabumi, banjir (di DKI Jakarta) dan abu vulkanik (tahap pengembangan)
- Peta dan daftar kejadian
- Fungsi penyaringan dan perbesaran
- Membuka laporan dalam format PDF
- Mengunduh laporan dan data
- Publikasi laporan ke InAWARE (hanya gempabumi)
- Alur pemrosesan terotomatisasi

**Further reading:**

- realtime.inasafe: [http://realtime.inasafe.org](http://realtime.inasafe.org)
- InaSAFE: [http://inasafe.org](http://inasafe.org)
- BNPB: [http://inasafe.bnpb.go.id](http://inasafe.bnpb.go.id)
- BNPB: [http://inasafe.bnpb.go.id](http://inasafe.bnpb.go.id)