TREC IS USER PROFILE *EARTHQUAKE*

User Description

The user is a public safety officer in the central command and control centre for an earthquake type event. The user has two main responsibilities:

1. To identify actionable information that the other officers can use to direct their response efforts. This might be information such as roads have become blocked or unusable, or geo-located images that show damage caused that can help estimate severity of need.
2. To answer questions that the public might have about the event or what to do. This might be questions about what they should do, or where they should go. The officer may also need to interject in conversations, to correct inaccurate advice.

Existing Knowledge

It is assumed that the officer already has some existing information about the event, and hence what is considered relevant to them is different than what is relevant to the event. For example, the tweet:

- RT @nicoleewayne: Tennessee USA Knoxville http://t.co/RdBC6022xO #earthquake BREAKING NEWS 816 earthquake Northern California braces…

is relevant to the event, but it can be assumed that the user already knows about the event, and hence this information is not relevant to them (it will not help them with their responsibilities).

To this end, we assume that the officer already knows the following information, and hence tweets containing only this information will not be relevant:

- The officer already knows that the earthquake has occurred
- The officer already knows the earthquake magnitude
- The officer knows the general location of the event (city-level)

Examples of actionable information

- Reports of Damage (which can help determine how to prioritise responses)
- Reports of services becoming available or being closed (e.g. transport, shelter, food/water distribution points, hospitals)
- Reports of failures in transport infrastructure (roads blocked/congested, bridges down)
- Calls for help/rescue
- Clean-up efforts
- Images/maps/videos showing damage
- Warnings/Watch Alerts

Information Type Matching

These are broad information type matches identified when labelling the training data

- Reports of the Quake – Known Information
- Report of quake with generic statement that warnings are in effect - Known Information
- Tsunami Watch – Official
- Report of quake with specific statement that warning is issued for region - Official
- Revision of magnitude – Significant Event Change
- Report of damage (third-party) – Third Party Observation
- Evacuation recommendation by third party – Move People
- Report of Landslides – Emerging Threats
- Warning Region Changed - Significant Event Change
- Red-Cross Casualty Report – Factoid
- Red Cross tweet linking to their action – Service Available
- Follow-up Quakes - Known Information