## Team Planner

Javier Larrosa September 15, 2016

## Abstract

Project.

## 1 Description of the problem

Consider a set of m missions that have to be done. Each mission  $m_i$  requires a team of people of size at least  $lm_i$  and at most  $um_i$ . We have a set of n people to make the teams. Each person  $p_i$  has to participate in at least  $lp_i$  missions and at most  $up_i$  missions. Besides, for any pair of missions there must be exactly one person that participates in both of them.

Write a MiniZinc model for this problem using Sets. The input is: m, n, and four arrays containg the upper and lower bounds (i.e,  $lm_i, um_i, lp_i, up_i$ ).