[l04] solutions

[l04_p01] project

wim mees

introduction

intro

- we have decided which risks need to be addressed
- we now need to design the solution,
  we will start at a meta-policy level

GAST

data flow diagram

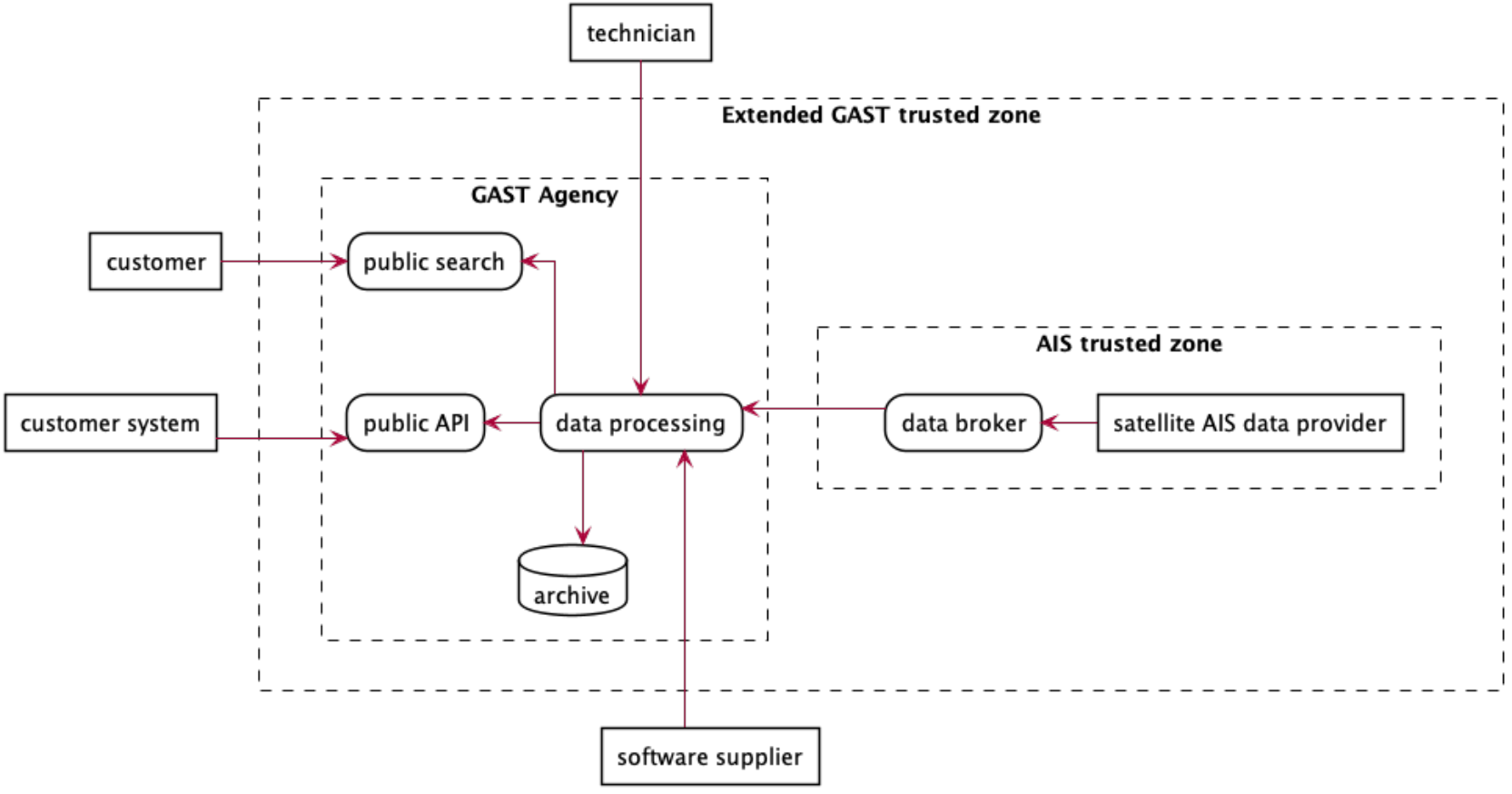

Figure 1: data flow diagram 1

scope for the policies

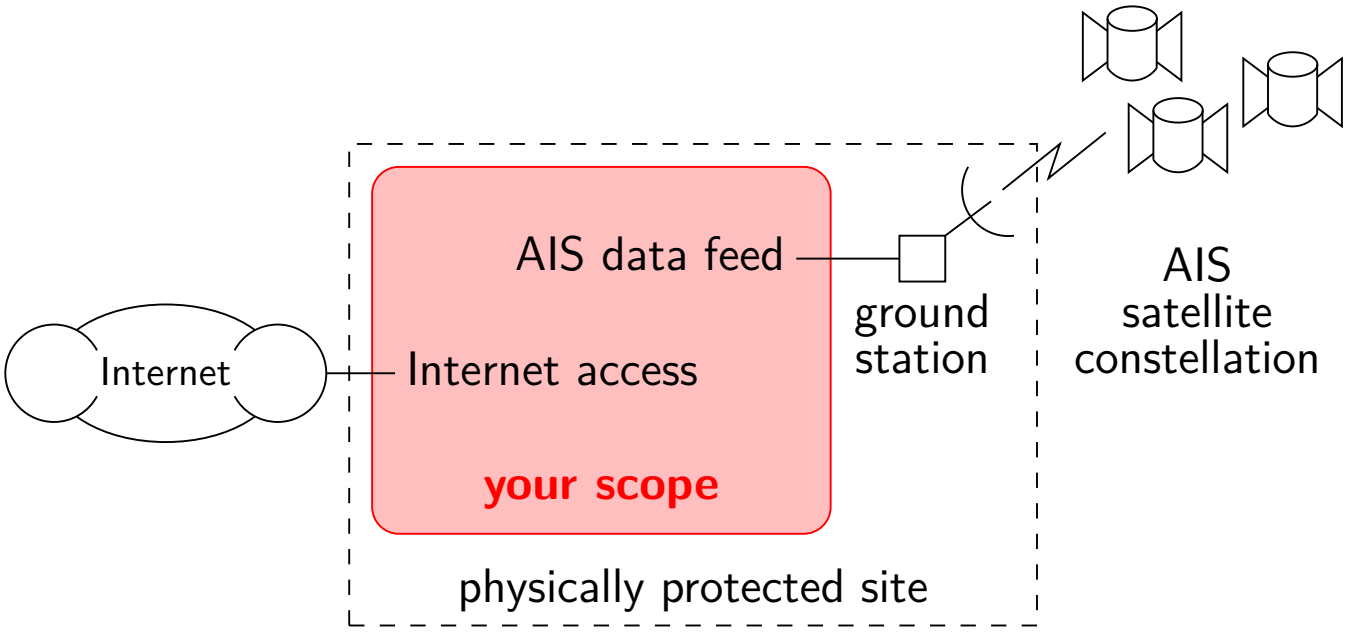

Figure 2: scope for the exercise

information domain segmentation

confidentiality classification levels

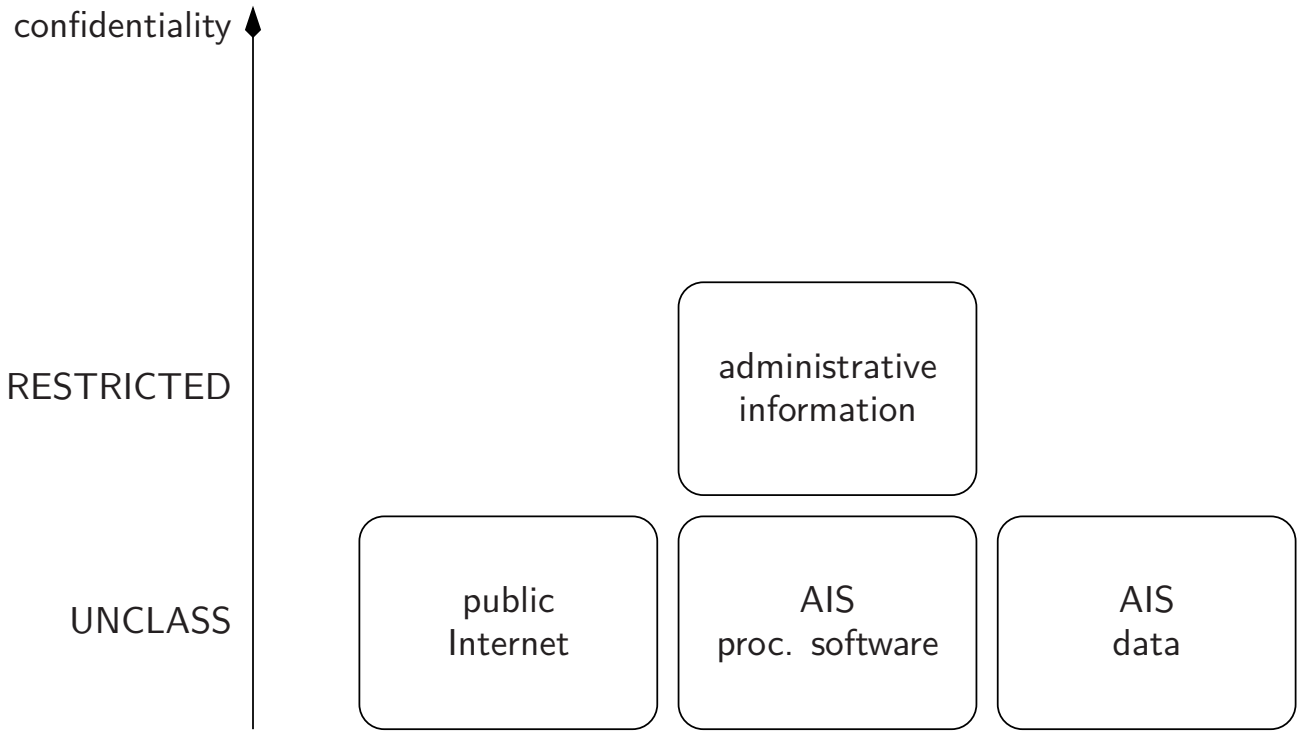

Figure 3: information domains

information domain segmentation

information flow policy for confidentiality

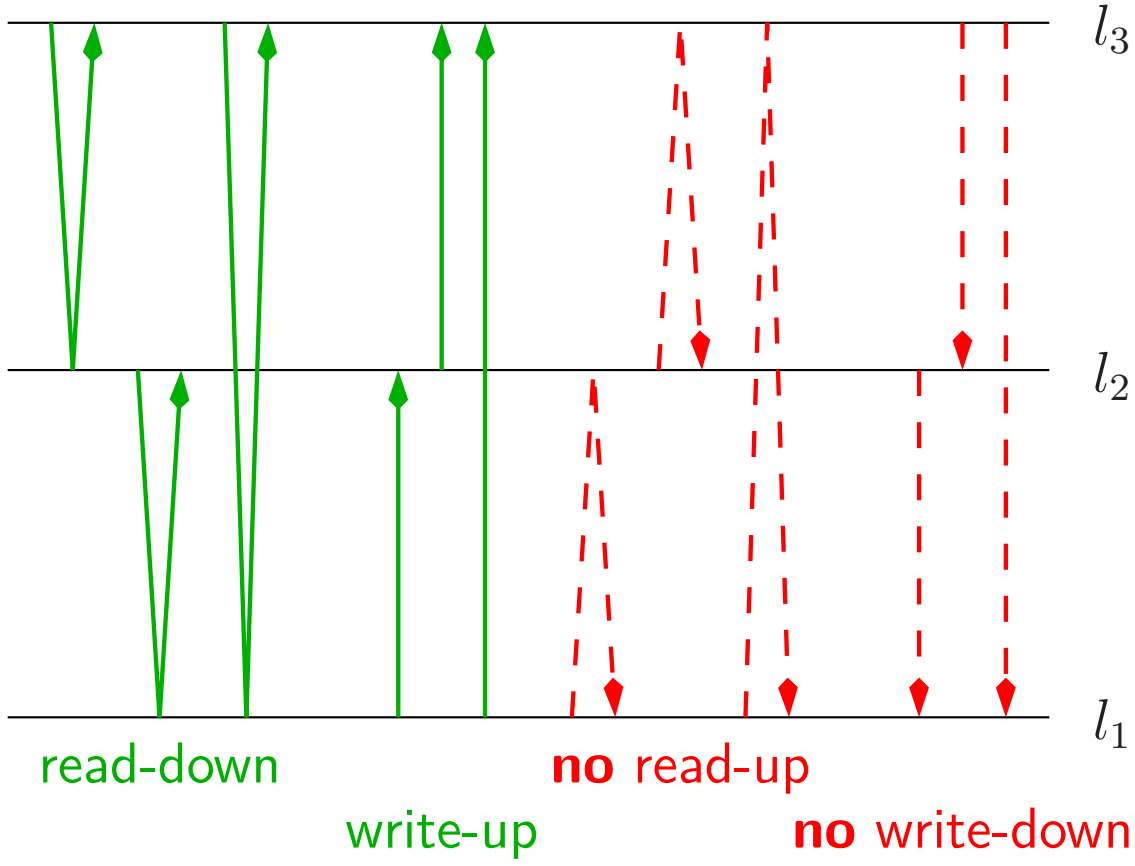

Figure 4: Bell LaPadula model

information domain segmentation

integrity classification levels

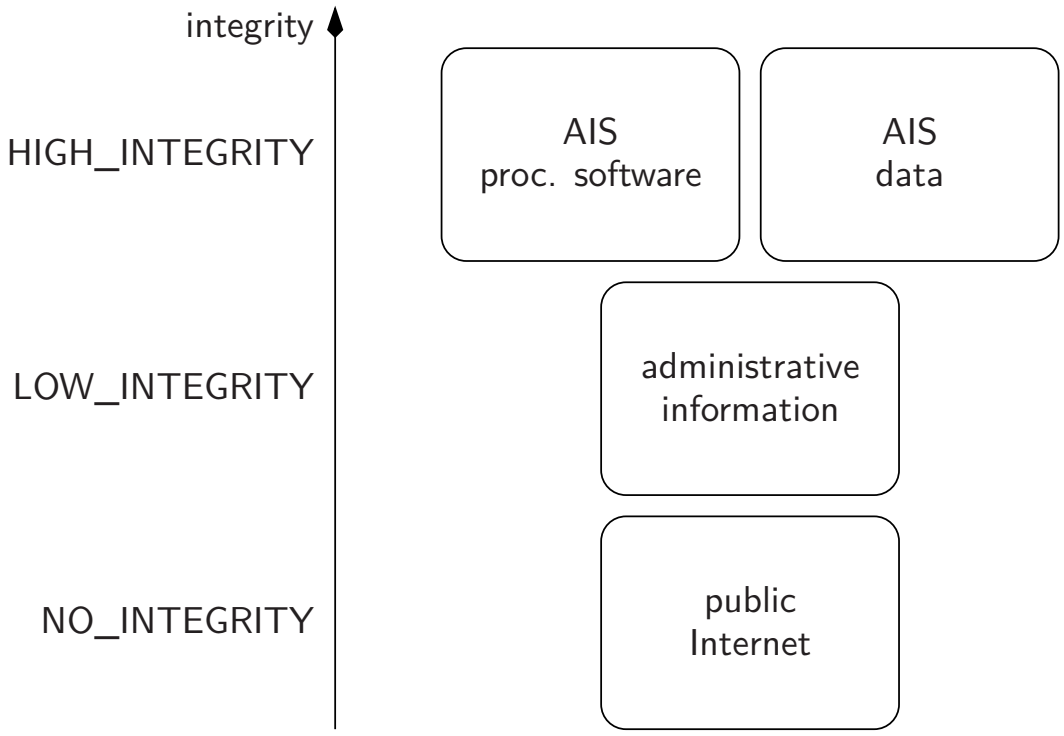

Figure 5: information domains

information domain segmentation

"ring" information flow policy for integrity

the *"ring policy"* consists of 2 rules:

1. any subject can read any object, regardless of integrity levels
2. subjects S can write to object O only if $I(O) \leq I(S)$

ring policy requires trusting the subject, assuming a subject can properly filter the information it receives

information domain segmentation

"strict integrity" "information flow policy

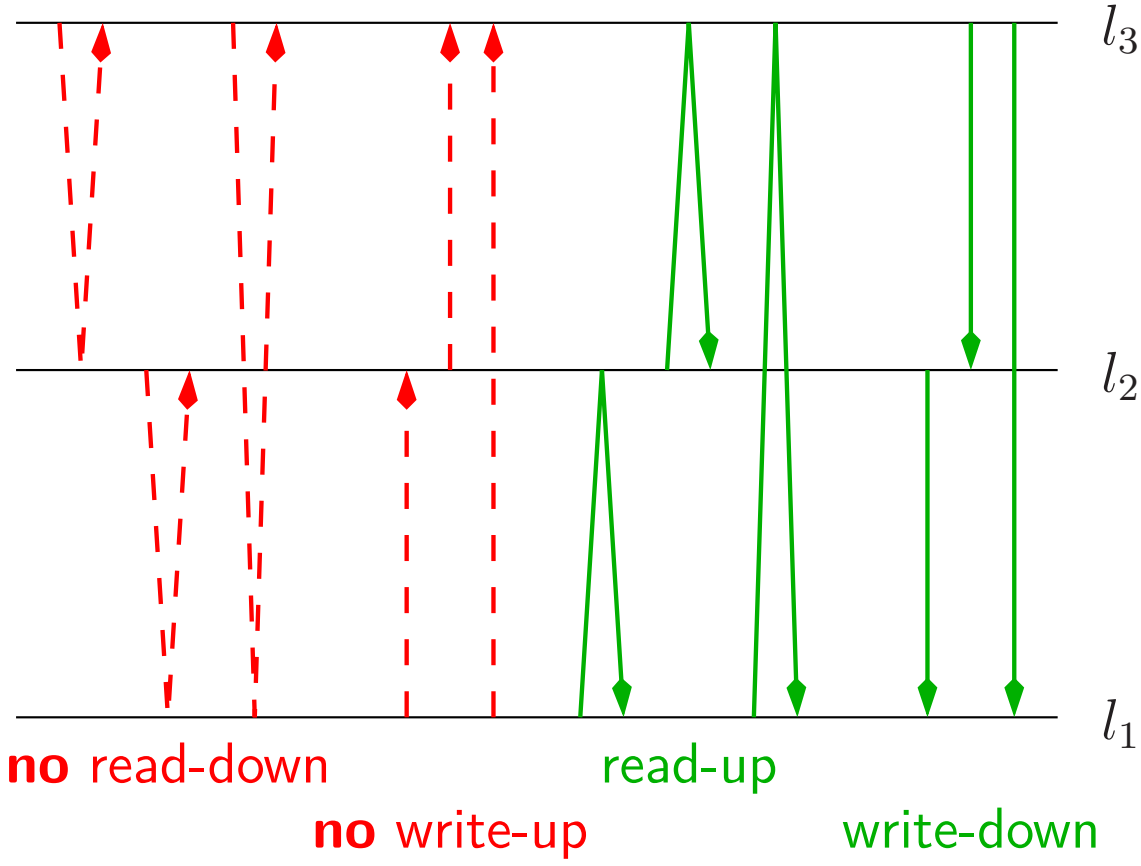

Figure 6: Biba model

network design for confidentiality and integrity

information domain segmentation

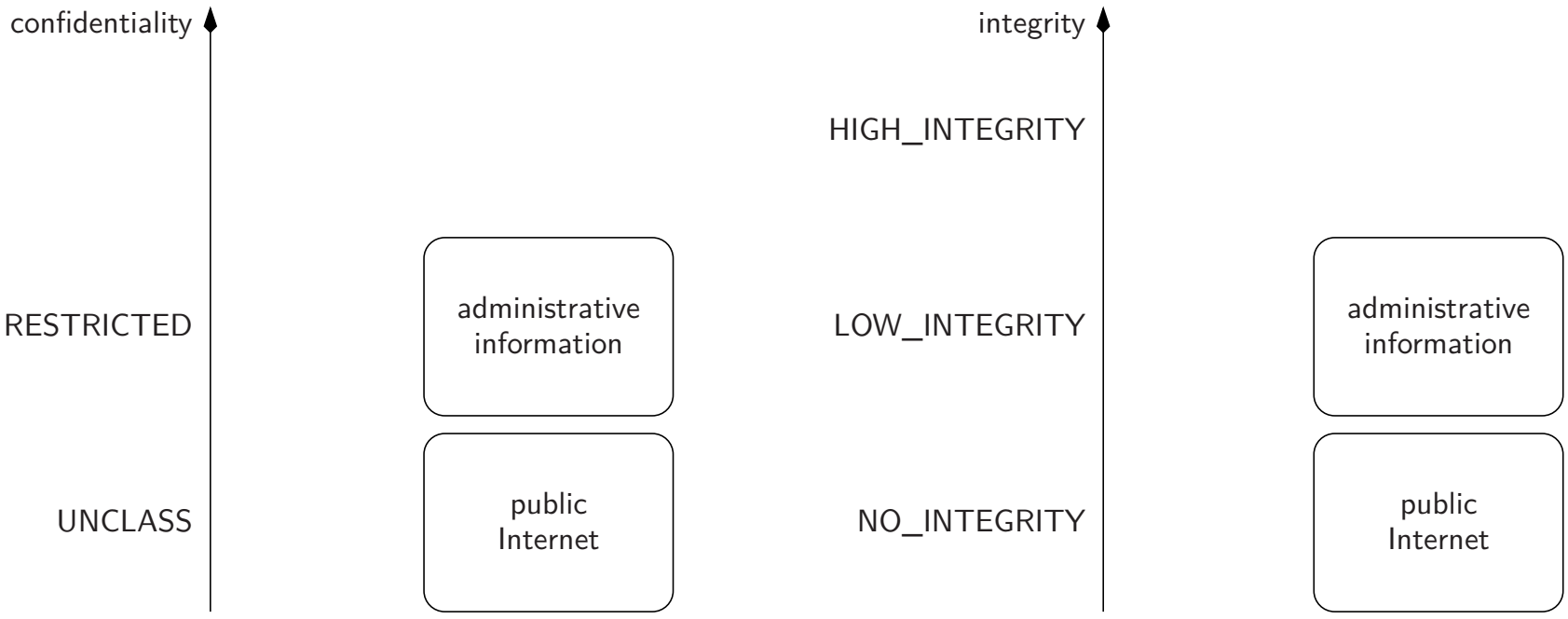

Figure 7: information domains

information domain segmentation

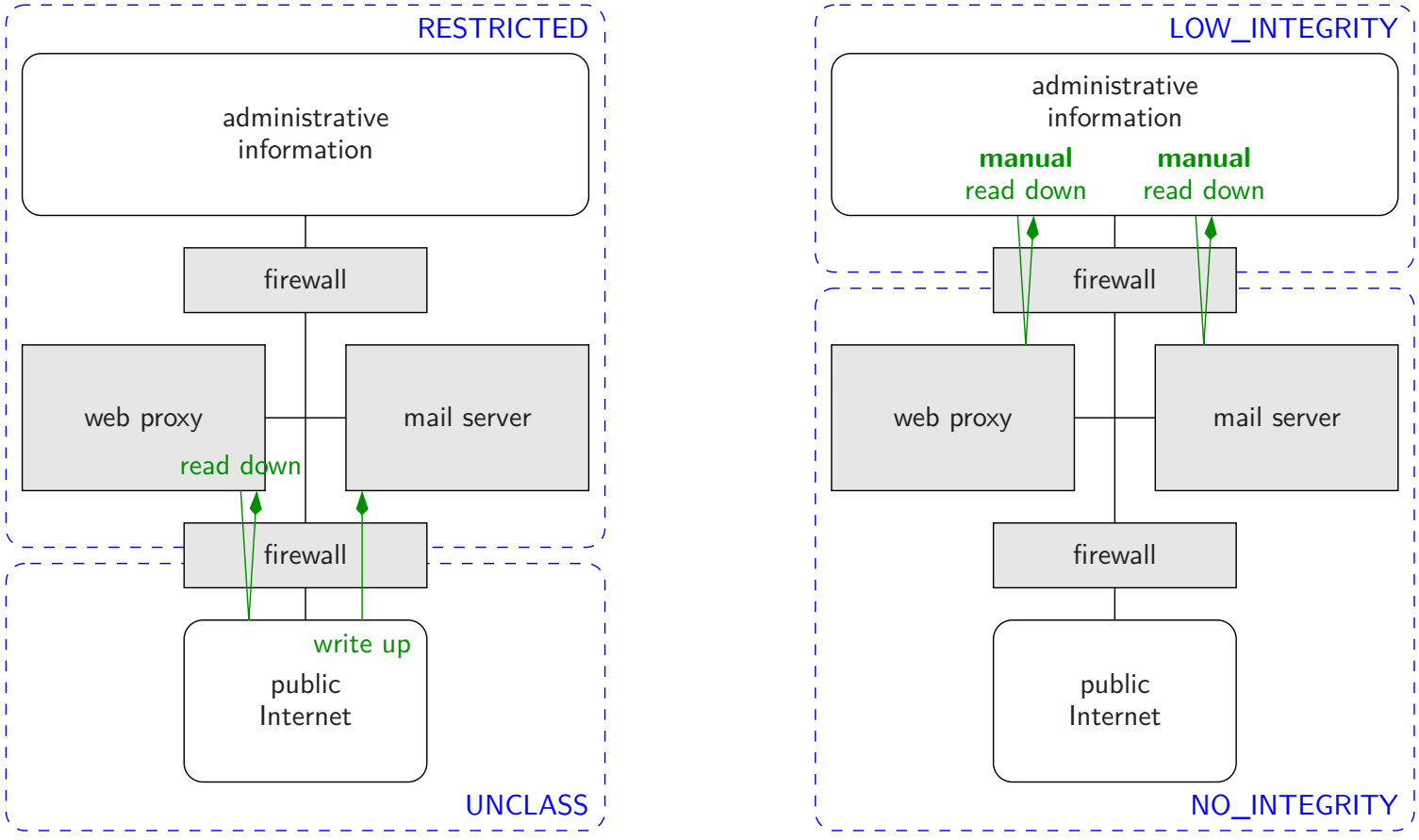

Figure 8: network topology

information domain segmentation

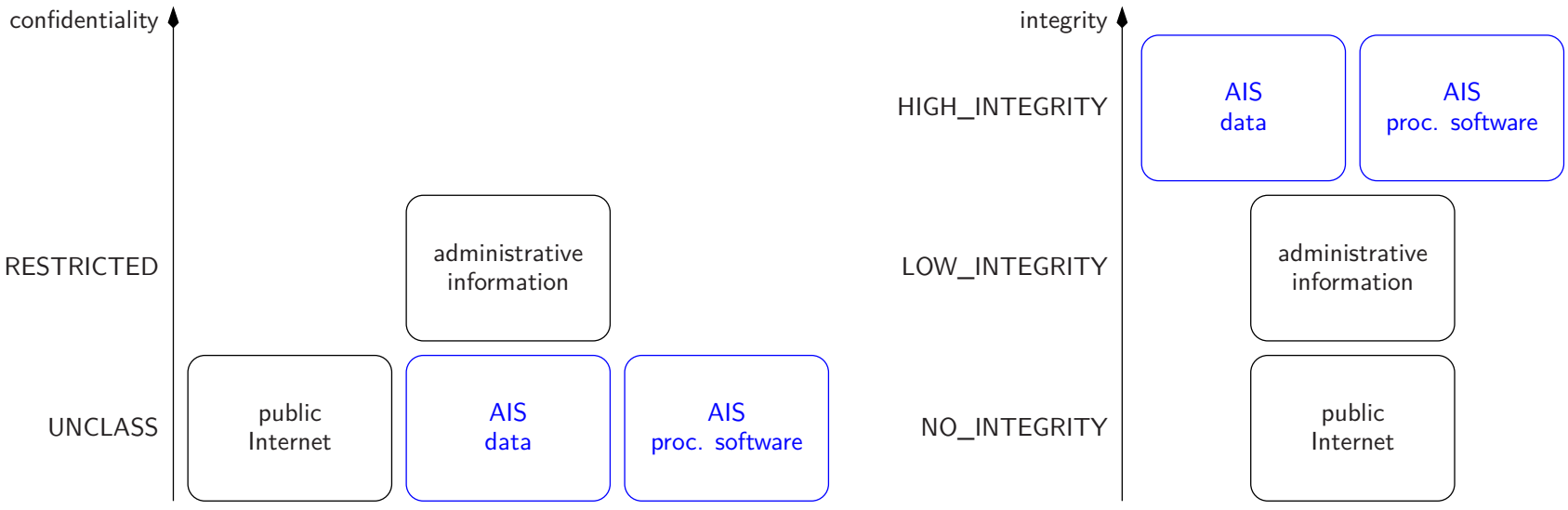

Figure 9: information domains

information domain segmentation

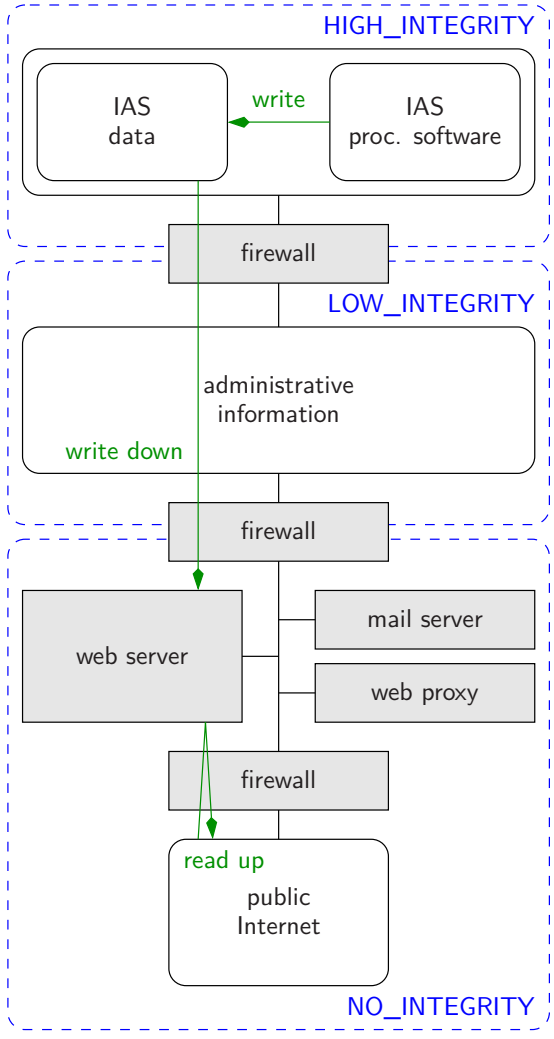

Figure 10: network topology

conclusions

what is expected from you

your project

- think about which overarching meta-policy you will choose for GASEO and how you will implement it

conclusions

Figure 11: questions or comments ?