Data Input Component of CropGen International Consultancy for GCP

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Segment 1

Design and implement a data capture and storage system for all data generated in all GCP projects that allows for retrospective analysis across data sets

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Current GCP System

All data is stored in the GCP Central Registry

(CR) which is not a database and, therefore, does not

conform to GCP management

requirements to facilitate retrospective across

data set reanalysis of data generated through

GCP investment

This will continue

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Proposal

- Use crop specific ICIS for data storage
- Use existing crop specific versions of ICIS where available
- Create new versions where these do not currently exist
- All data generated through GCP investment will be incorporated in these databases
- GCP project partners are free to use other databases as well

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Proposal (Continued)

- GCP will provide a data input "wizard" for completion by Principal Investigators (PIs)
- GCP will arrange the data to be input into the crop specific ICIS using the wizard
- CropGen will design the content for the wizard in consultation with potential users and Guy Davenport
- Guy Davenport will do the software development
- GCP Principal Investigators will not be expected to be ICIS literate

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Features of Stored Data

- detailed project description
- comprehensive environmental descriptors (emphasising drought)
- unique germplasm descriptors
- attribute descriptors that provide complete understanding of the method of measurement
- plot data as well as analysed data

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Crop Species Will Include

- cassava
- chickpeas
- common bean
- cowpea
- groundnut
- potato
- sweet potato
- maize
- pearl millet
- rice
- sorghum
- wheat

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Segment 2

Provide GCP Management with a proposal for implementing electronic data capture for breeders of some of the above crop species who work in resource poor countries

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Components

- determine if the target breeders want such a system
- determine that such a system can interface with ICIS
- identify the magnitude of interface problems
- locate appropriate hardware
- canvas software options and availability
- develop an implementation strategy

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Purpose of attending this meeting

- Determine the feasibility of the proposal
- Identify as many issues as possible that have to be resolved
- Develop options for addressing these issues

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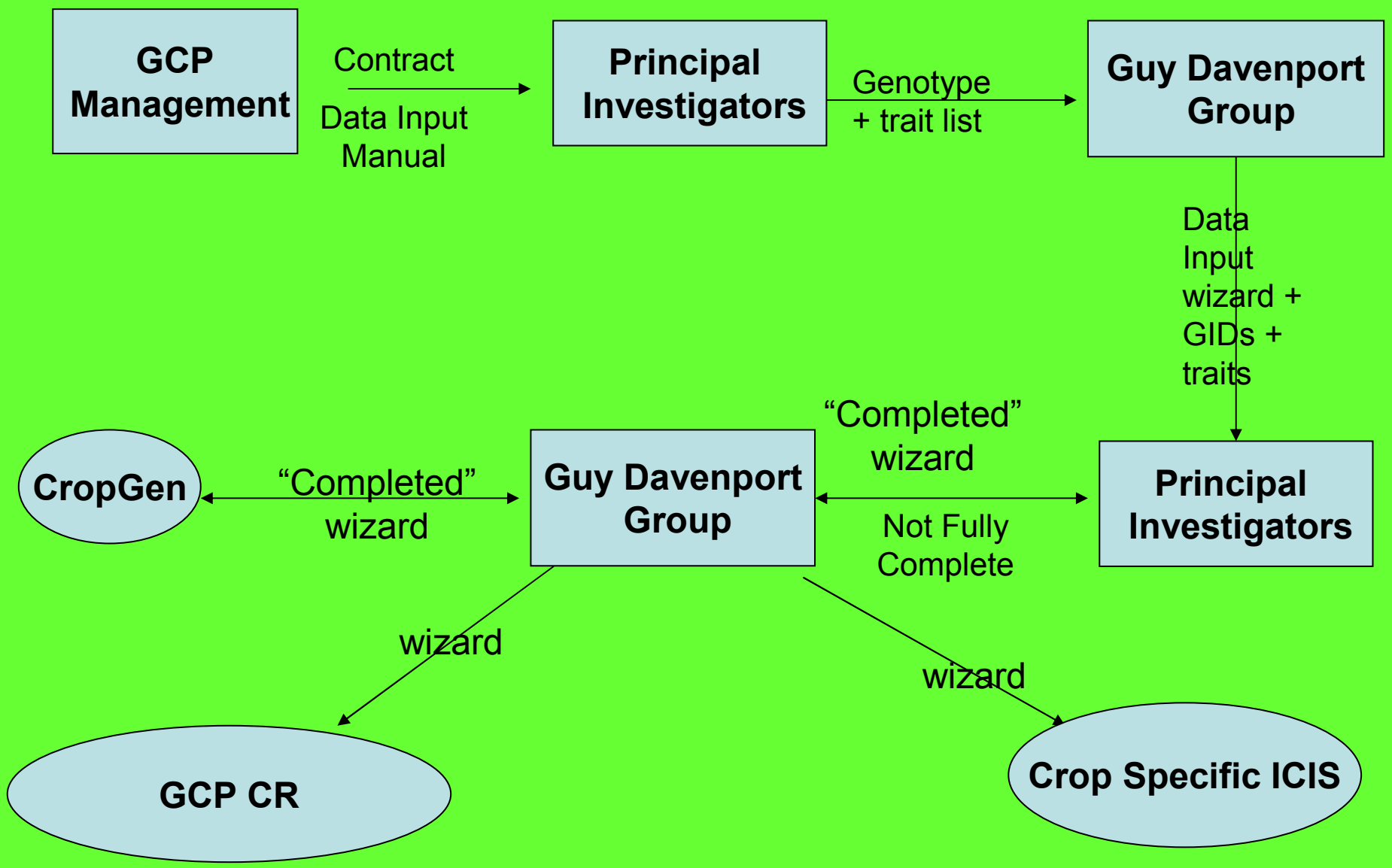
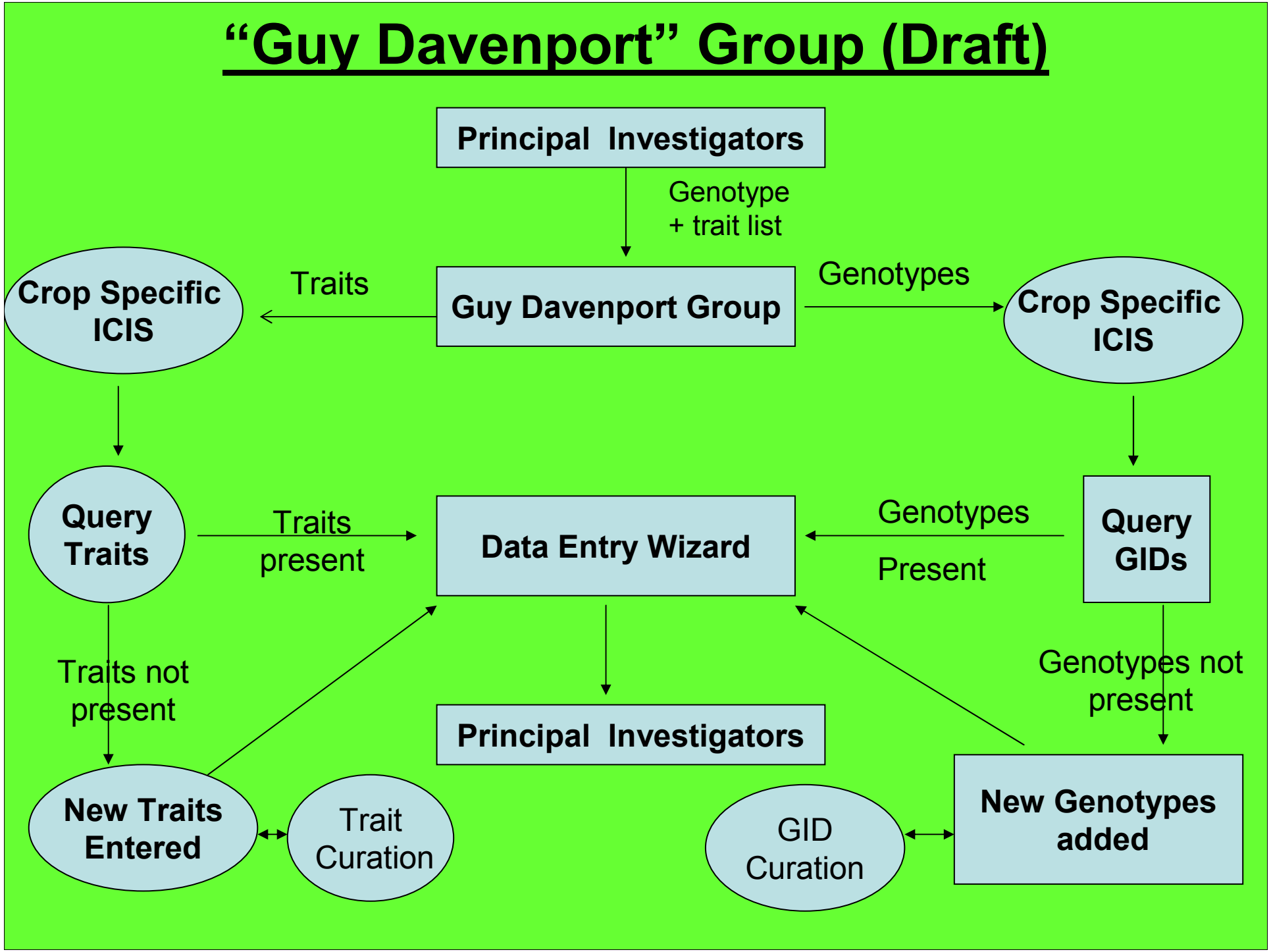
GCP Data Management (Draft)



"Guy Davenport" Group (Draft)



Programming Language for Wizard

Use excel with macros linked to ICIS

Pro: This already exists

Con: need to download & install ICIS,

some institutes are thinking about outlawing excel macros for security reasons

current version is not very user friendly and work would be need to get a wizard type interface

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Programming Language for Wizard

Extend the current Java template program to generate the excel template

Pro: this will be building on existing work

Con: need some connection to ICIS (either local or remove) to get the existing and available traits, this will require some development work

(This could be done at CIMMYT)

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Programming Language for Wizard

Develop a new web interface for generating excel (workbook) templates from ICIS

Pro: You would not need to download any ICIS database

Con: This would be a completely new development project and you would need an internet connection (This could be done at CIMMYT or IRRI)

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