World Croquet Federation
Global Player & Games Database
Feasibility Study Terms of Reference

1   Overview

1.1   Background

The World Croquet Federation (WCF) has identified potential benefits of implementing a Global Player & Games Database (GP&GDB) and wish to carry out a study to establish the scope, feasibility (or otherwise) and costs of implementing such a system. To this end they have produced a brief definition of a Feasibility Study project. They have also constituted a Working Party (WP) to carry out the study and report its findings by the end of 2020. The WP's members are:

Phil Cordingley (England, Chair), Tim Murphy (Australia), Damon Bidencope (USA), Chris Williams (AC Ranking Officer) and Stephen Mulliner (GC Ranking Officer)

In addition Begona Elzaburo (Spain) and Rod Templeman (New Zealand) have been invited to participate as observers.

1.2   Document Purpose

The purpose of this document is to define the scope of the Feasibility Study and its deliverables.

1.3   Reporting

The WP will produce its report for consideration by the WCF Management Committee.

Individual WP Members and Observers will be responsible for liaising with their own organisations as they see fit.

Should it be felt necessary to liaise with other WCF Members this will be done via the WCF MC.

1.4   Exclusions

The study will not explicitly consider requirements to support any future global Tournament Management system, should one ever be developed.

The study will not explicitly consider requirements arising from any proposed smartphone or tablet implementation which may be different from those of a solely desktop or laptop based implementation.

2   Systems To Be Supported

The Feasibility Study will look at the requirements of a GP&GDB to support the following systems identified to date:

a) Global Ranking, AC & GC: both well established, automated systems
b) Global Tournament Results: Croquetscores, well established, automated system
c) Automatic Handicap Systems, AC & GC: well established manual systems. Some global standardisation and alignment carried out to date. A separate group has been established to consider the feasibility of implementing a Global Handicap System. This WP will liaise with that group to ensure as far as possible that any further proposed standardisation and alignment is taken into account for the GP&GDB
d) Existing WCF Member Databases: the CA have a system. Others to be identified explicitly and included in the study
e) Tournament Management: currently no standard software to do this, tournament managers generally doing their own thing with little or no sharing. This situation is likely to endure for the foreseeable future, thus requirements for any sort of Global Tournament Management System not included in this study
f) General database enquiries

Other systems identified during the study will be considered on an individual basis according to relevance as candidates for inclusion.

Whilst the primary focus of the work will be on 26 point, handicap and level AC and GC games, other forms will be considered (US Rules, shortened games etc.) with a view to producing a sufficiently generic solution as to facilitate their subsequent inclusion.

3   Security

3.1   Data Protection

These days there is significant legislative protection provided for people whose data is held in IT systems. The study will identify system requirements arising from those. Foremost amongst such legislation is probably the European Union's General Data Protection Regulation (GDPR). Other regulations will be identified and incorporated in the study according to their relevance.

3.2   Data Access

Different classes of users of the GP&GDB will be identified, and their corresponding access required to its functionality.

4   Business/Logical Data Model & Functionality

Once the system requirements have been identified a Business/Logical Data Model will be produced, which will define the database structure and contents at a business/logical level in the form of a high-level Entity Relationship Diagram (ERD). The ERD will be capable of comprehension by those with minimal IT technical expertise, though some aptitude will be required. See https://www.cs.uregina.ca/Links/class-info/215/erd/ for a relatively simple explanation of what an ERD is.

Similarly a high-level definition of the functionality to be provided by the GP&GDB will be produced.

5   Data & Transaction Volumes

The study will provide estimates of initial data volumes and projected annual growth rates.

6   Implementation

6.1   Commissioning & Resources

The study will include consideration of how the system once specified will be developed. The principal options are

    a) Identify a proprietary, off the shelf package (unlikely)
    b) Commission a professional systems development company (expensive)
    c) Use resources and skills possessed by croquet players the world over (tricky to manage)

Allied to this consideration will be given to how the system is to be supported and maintained subsequent to implementation. However the system is implemented, the WCF will undoubtedly need to appoint a Database Administrator and 'Help Desk' contact.

The study will establish system availability requirements in terms of average availability, maximum down time etc.

6.2   System & Software Architecture

However it is implemented, the system architecture is likely to be based on a Cloud based proprietary database server and browser or application based client software. The study will identify alternatives should they emerge.

6.3   Initial DB Population

Sources of data and processing required to provide an initial population of the GP&GDB will be identified.

6.4   High Level Project Plan

A high level implementation plan will be produced.

7   Deliverables

The study will produce:

    a) The study report, including a high level Business/Logical Data Model
    b) Illustrative, high level implementation project plan with timescales
    c) Conclusions & recommended next steps