Spanish Point technologies ltd

Specification – 3rd Party Access to ISWC DB

Document Control

Change Record

Date	Person	Version/Reference
11/07/2022	John Corley	Initial Draft
08/08/2022	John Corley	Incorporating initial feedback from Society and 3rd Party workshops
28/10/2022	John Corley	Incorporated additional feedback and added implementation details
19/12/2022	Curnan Reidy	Incorporated additional feedback

Reviewers

Sylvain Piat - CISAC

José Macarro – CISAC

Declan Rudden – SaorServices

Curnán Reidy - Spanish Point

Distribution

Reviewers

Table of Contents

1 Scope, Objectives and Approach

Background and Scope

The CISAC Board has approved the provision of certain ISWC Search Services to 3rd Parties in the wider music industry e.g. DSPs, Aggregators etc. The scope of the services has already been agreed as follows:

- 3rd Party sends an ISWC and receives the related metadata (title, creators' names and IP Name Numbers) for that ISWC

- 3rd Party sends a society work code and receives the Preferred ISWC together with the metadata for that ISWC

- 3rd Party sends work-related data (title, creators' names) and receives a Preferred ISWC, if and when, a unique match to Preferred ISWC is found (where multiple matches are found, results would not be returned)

Objectives

One of the CISAC Board's key strategic objectives for the ISWC is to ensure that it is broadly implemented by all stakeholders in the value chain. This can be achieved through the provision of bulk services to Publishers and industry third parties, e.g., DSPs and data-aggregators.

The ISWC public portal already exists to allow the general public to search the database via either ISWC, Work Code, Title and Creator, or Creator only. The search returns the Preferred ISWC, core metadata (Titles and Creators), Performers and Work Code information. Only one search can be carried out at a time, as no batch services are catered for in the portal.

Therefore, the Board has approved providing access to automated search services in bulk to the wider music industry to connect to the ISWC database. Essentially this would allow 3rd party services carry out most of the same queries allowed via the ISWC Public Portal but in automated approach. Thus, ensuring that the ISWC can be used by 3rd parties as an identifier on musical works within their documentation systems.

Approach

A design and implementation team composed of the following will be formed:

- Representatives from CISAC and CISAC's suppliers (Spanish Point and SaorServices)

- CISAC Member society representatives

- Representatives from the 3rd Parties who intend to implement the initial version of the solution

This project team will be responsible for producing a draft proposed design for the service as well as co-ordinating the testing and transition of the service into live use. The project team will interact with the existing governance framework in place in CISAC as per the following high level RACI Matrix:

Activity	Project Team	CISAC Steering Group	CISAC ISC
Create draft design document and implementation plan (this document)	R	A/C	I
Recommend design and associated costs to the ISC for Approval	I	R	A/C
Approve expenditure	I/C	I/C	R
Develop Service	R	A/C	I

Plan and Complete UAT	R	A/C	I
Propose Transition to Production / Go Live	C	R	A/C
Transition to Production / Go Live	R	A/C	I

RACI Definitions:

- **R**esponsible (The people who carry out the work)

- **A**ccountable (The people accountable for the process or task being completed appropriately)

- **C**onsulted (People who are not directly involved with carrying out the task but who are consulted)

- **I**nformed (Those who receive output from the process or task, or who have a need to stay informed

Roadmap

The following shows the outline delivery roadmap:
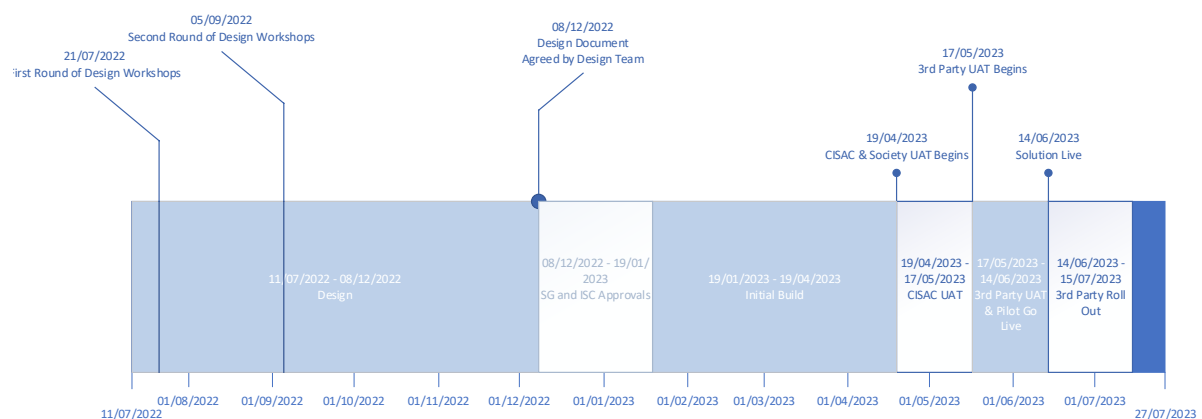
Key Milestones include:

- w/c 5th Sep 2022 – Second round of design workshops (society and 3rd party workshops)

- 8th Dec 2022 – Design document agreed by society and 3rd party design teams

- 19th Jan 2023 – Approval to proceed by ISWC SG and ISC. Build commences

- 19th Apr 2023 – CISAC UAT including participation from interested societies

- 10th May 2023 – Agreement to Terms and Conditions for 3rd Parties using the service

- 17th May 2023 – 3rd Party UAT + Pilot go live by one 3rd Party

- 14th Jun 2023 – 3rd Party Roll Out begins

2 Functional Design

Service Operations & Data Exchange

searchByIswc

3rd Party sends an ISWC and receives the related metadata (title, creators' names and IP Name Numbers) for that ISWC.

Input:

```
    "iswc": "T0302332086"
```

Outputs:

```json
[{
    "iswc": "T0302332086",
    "agency": "128",
    "originalTitle": "TI ME KE VRA",
    "otherTitles": [],
    "interestedParties": [{
      "name": "PRELVUKAJ GENC",
      "lastName": "PRELVUKAJ",
      "nameNumber": 375001586,
      "role": "C",
      "legalEntityType": "N",
      "affiliation": "123"
    }],
    "linkedISWC": [],
    "createdDate": "2019-03-14T00:30:16+00:00",
    "lastModifiedDate": "2019-03-14T00:30:16+00:00"
  }]
```

Rules:

No additional rules over what are applied in the current society focussed REST API/JSON Exchange with the exception of the following additional rules:

- Info returned will be as per "coreAndLinks" search result set.

- Exclude IPs with a rolled up role of "E" (Original Publisher and Administrator roles) as these may be territory specific

- IP Affiliation will be hidden/displayed depending on a new configuration setting. The default will be to hide IP Affiliation details.

- Performer information will not be shown

- Agency Work Code Information will not be shown

How to Interpret the Results:

Invalid ISWC Submitted

If an invalid ISWC is submitted to the service the following error information is provided in the response content under the 400 (Bad Request) response status:

```
{
    "code": "113",
    "message": "ISWC format error [T][0-9]{10}"
}
```

```
{
    "code": "141",
    "message": "ISWC format error – Invalid Check Digit"
}
```

ISWC Not Found

Some ISWCs, allocated by agencies from their local ranges prior to July 2020, are not yet visible in the ISWC portal. Agencies are undergoing a reconciliation and data cleaning process with the aim of having all information up-to-date in the database. Larger gaps in these locally allocated ISWCs have been addressed. If a valid ISWC is submitted but not present in the ISWC DB then this is indicated through the 404 (Not Found) response status with the text "ISWC not found." In the response content.

searchByAgencyWorkCode

3rd Party sends an agency id (a three-digit agency code) and agency work code and receives the relevant ISWC and the related metadata (title, creators' names and IP Name Numbers) for that ISWC. It is not possible for an Agency Work Code to exist on more than one ISWC record; therefore there are only two scenarios possible based on this search. A single exact match or no match.

Input:

```
    "agency": "128",
    "workcode": "R28995187"
```

Note: Complete list of agency (society) codes is available for download from CISAC here: https://members.cisac.org/CisacPortal/initConsultDoc.do?idDoc=24111

Note: Certain agencies adopt specific conventions in relation to leading zeroes for their agency work codes. E.G. ASCAP expects a work code in the following format: 00000343832437. Search requests should follow these conventions in order to successful make requests. Developers can use the existing public ISWC portal (https://iswcnet.cisac.org/) to observe the agency work code convention for specific agencies.

Outputs:

```
[{
    "iswc": "T0302332086",
    "agency": "128",
    "originalTitle": "TI ME KE VRA",
    "otherTitles": [],
    "interestedParties": [{
      "name": "PRELVUKAJ GENC",
      "lastName": "PRELVUKAJ",
      "nameNumber": 375001586,
      "role": "C",
      "legalEntityType": "N",
      "affiliation": "123"
    }],
    "linkedISWC": [],
    "createdDate": "2019-03-14T00:30:16+00:00",
    "lastModifiedDate": "2019-03-14T00:30:16+00:00"
  }]
```

Rules:

No additional rules over what are applied in the current society focussed REST API/JSON Exchange with the exception of the following: .

- Info returned will be as per "coreAndLinks" search result set.

- Exclude IPs with a rolled up role of "E" (Original Publisher and Administrator roles) as these may be territory specific

- IP Affiliation will be hidden/displayed depending on a new configuration setting. The default will be to hide IP Affiliation details.

- Performer information will not be shown

- Agency Work Codes will not be shown

How to Interpret the Results:

ISWC Not Found

If there is no ISWC in the ISWC DB for the combination of agency and workcode provided then this is indicated through the 404 (Not Found) response status with the text "ISWC not found." In the response content.   Note: agency and workcode formats are not individually validated or verified. An invalid agency code will result in the same 404 (Not Found) response status.

Verifying Returned Metadata

3rd Parties should , where possible, verify similarity of title information returned with the title information in their own source database in order to ensure that mistakes in a provided agency or workcode information don't result in entirely the wrong ISWC being returned.

searchByTitleAndContributor

3rd Party sends complete title and contributor information and receives the relevant ISWC and the related metadata (title, creators' names and IP Name Numbers) for that ISWC if there is exactly one matching ISWC for the search parameters.

Input:

```json
{
    "titles": [
      {
        "title": "TI ME KE VRA",
        "type": "OT"
      }
    ],
    "interestedParties": [
      {
        "lastName": "PRELVUKAJ",
        "nameNumber": 375001586,
        "role": "CA"
      }
    ]
  }
```

Notes:

- Complete list of creator IPs is required

- lastName or nameNumber can be provided for each IP.

- Role is optional and not used.

Outputs:

```json
[{
    "iswc": "T0302332086",
    "agency": "128",
    "originalTitle": "TI ME KE VRA",
    "otherTitles": [],
    "interestedParties": [{
      "name": "PRELVUKAJ GENC",
      "lastName": "PRELVUKAJ",
      "nameNumber": 375001586,
      "role": "C",
      "legalEntityType": "N",
      "affiliation": "123"
    }],
    "linkedISWC": [],
```

```
    "createdDate": "2019-03-14T00:30:16+00:00",
    "lastModifiedDate": "2019-03-14T00:30:16+00:00"
}]
```

NOTE: Creator Count

Creator Count (the number of contributors to a work) is important in uniquely identifying works; particularly in distinguishing between and Original Work and an Adaptation/Arrangement of the work.

For example, to find the original version of 'Love Me Do' by the Beatles, the search should include both Lennon and McCartney.

Preferred ISWC ∨	Original Title ∨	Rank ∨	Creator Name(s)	IP Name Number
T-010.078.385-4	LOVE ME DO	1	MCCARTNEY PAUL JAMES, LENNON JOHN WINSTON	00018873266, 00017798450

Whereas to find the Japanese translation, the search should include Lennon, McCartney and Shimamura

Preferred ISWC	Original Title	Rank	Creator Name(s)	IP Name Number
T-915.742.971-5	LOVE ME DO	2	MCCARTNEY PAUL JAMES, SHIMAMURA YOJI, LENNON JOHN WINSTON	00018873266, 00028558757, 00017798450

As there are a number of Translations, a search by 'Love Me Do' and just 'Lennon' would result in multiple matches; therefore, per the rules below, no ISWC will be returned.

Rules:

The same rules that are present in the publisher resolution service will be applied including the following:

- IP Base number will not be shown.

- The query will be read-only. No tracking of 3rd party submissions for notification etc will take place.

- Info returned will be as per "coreAndLinks" search result set.

- No results will be returned if more than one matching result is found.

- Exclude IPs with a rolled up role of "E" (Original Publisher and Administrator roles) as these may be territory specific

- IP Affiliation will be hidden/displayed depending on a new configuration setting. The default will be to hide IP Affiliation details.

- Performer information will not be shown

- Agency Work Code will not be shown

How to Interpret the Results:

Invalid Request

If the submitted search contains invalid or missing parameters then this is indicated through the 400 (Bad Request) status with a response content similar to below:

```
{
    "errors": {
      "titles[0].type": ["Error converting value \"xs\" to type
'SpanishPoint.Azure.Iswc.Api.V1.TitleType'. Path 'titles[0].type', line 5,
position 20."]
    },
    "type": "https://tools.ietf.org/html/rfc7231#section-6.5.1",
    "title": "One or more validation errors occurred.",
    "status": 400,
    "traceId": "00-8ee2f6b033db0948bb68f626ec12ba52-e74e06ba02b46a4a-00"
  }
```

ISWC not found

If the submitted search produces no results then this is indicated through the 404 (Not Found) response status with the text "ISWC not found." In the response content.

Multiple ISWCs found

If the search parameters submitted produce multiple matches, no ISWCs will be returned. The submitter will receive the following message in the response content.

```
{
    "code": "164",
    "message": "Multiple matching ISWCs have been found"
}
```

General Rules for Interpreting Information Returned

The following information explains how to interpret the results from the above operations:

ISWCs With "parentISWC's"

Where the ISWC provided in the input parameter has been superseded/replaced by a different ISWC then two additional fields, alongside the "linkedISWC" are returned as follows:

```
"parentISWC": "T9090968948",
"overallParentISWC": "T9090968948",
```

The "parentISWC" represents the ISWC that the submitted input ISWC has been merged into/replaced by. This "parentISWC" may or may not have been merged into/replaced by other ISWCs up the tree like structure of ISWCs. The "overallParentISWC" represents the current active ISWC that is at the top of this tree structure and is the ISWC that should be used generally.

E.G. If you search for ISWC "T-909.096.968-9" through the REST API then you will get the following information returned as part of the response:

```
"parentISWC": "T9090968948",
"overallParentISWC": "T9090968948",
"linkedISWC": [],
```

On the public ISWC portal, if you do a search for this same ISWC then the information is represented as per the screenshot below:

Preferred ISWC ∨	Original Title ∨	Rank ∨	Creator Name(s)	IP Name Number	
T-909.096.968-9 ⓜ	ANKORAN (MANDOLINE)	1	BOTRIC EDUARD, HULJIC IVAN, HULJIC TONCI	00263478642, 00559227524, 00052054316	⋮ View Less

ⓜ Merge Information
This ISWC has been merged into the following Preferred ISWC: **T-909.096.894-8**
Search for this ISWC to view the current Preferred metadata for this work.

Titles:

All titles	Type
ANKORAN (MANDOLINE)	OT
LARIN IZBOR (SERIJA)	AT
ANKORAN	AT
ANKORAN (MANDOLINE)	TO

Creators:

Creator Name(s)	IP Name Number	Affiliation	Rolled Up Role
BOTRIC EDUARD	00263478642	HDS-ZAMP	MA (AR, SR)
HULJIC IVAN	00559227524	HDS-ZAMP	C (C,A,CA)
HULJIC TONCI	00052054316	Multiple	C (C,A,CA)

Archived ISWCs
T-803.383.776-3

If instead you search for ISWC "T-909.096.894-8" through the REST API then you will get the following information returned as part of the response:

```
"linkedISWC": ["T9090969689", "T9090969690", "T9090969769", "T9090969747",
"T9090970108", "T9090969781", "T9090968959", "T9090969736", "T9090969872",
"T9090968971", "T9090968982", "T9090968960", "T9090969930", "T9090969894",
"T9090969861"],
```

I.E. The "linkedISWC" array shows the ISWCs that have been merged into/replaced by the one searched for.   In this case ISWC "T-909.096.894-8" itself has not been merged into/replaced by another ISWC and therefore the "parentISWC" and "overallParentISWC" fields are not included.

Role

To ensure the Creator Count is consistent, the ISWC stores 'Rolled Up' Roles for contributors. Composer, Authors or Composer/Authors will be returned with a Role of 'C'. All Arrangers, Sub Arrangers will be returned with a Role of 'MA'. All Translators, Sub Authors will be returned with a Role of 'TA'.

The following table describes the mapping of CISAC standard roles to CISAC rolled up roles:

CISAC Rolled Up Role	CISAC Role Codes
C - Composer/Author	C – Composer, Writer

	A – Author, Writer, Author of Lyrics
	CA – Composer/Author
MA – Music Arranger	AR – Arranger
	SR – Sub Arranger
TA – Text Arranger	AD – Adaptor
	SA – Sub Author
	TR - Translator

JSON Exchange

Schema and Validation

All files should be validated against the schema, "iswc_schema.json" by the generator of the file. The ISWC database will validate all inbound files against the schema and any schema validation errors will result in the entire file being rejected.

Each file must consist of exactly one file header and zero or more transaction groups. Transaction groups include "searchByIswcSubmissions", "searchByAgencyWorkCodeSubmissions", "searchByTitleAndContributorsSubmissions", "acknowledgements" etc.

Each transaction group must contain zero or more transactions. E.G. the "searchByIswcSubmissions" transaction group must contain zero or more "SearchByIswcSubmissions" type transactions.

Def File Header

The file header contains the required header level metadata. The following is the simplest valid, though not very useful ISWC database JSON message:

```json
{
    "$schema": "./iswc_publisher_schema.json",
    "fileHeader": {
        "submittingPartyId": "PADPIDA3897722461G",
        "fileCreationDateTime": "2019-10-01T18:25:43.511Z"
    }
}
```

Transaction Groups

The following transaction groups are supported by the ISWC JSON format:

Transaction Group	Description	Orchestration
searchByIswcSubmissions	Requests for the ISWC metadata for the provided preferred ISWCs	Expected from 3rd parties to the ISWC Database
searchByAgencyWorkCodeSubmissions	Requests for the Preferred ISWCs for the provided set of Agency and Workcode values	Expected from 3rd parties to the ISWC Database
searchByTitleAndContributorsSubmissions	Requests for the Preferred ISWCs for the provided set of Titles and Interested Party values	Expected from 3rd parties to the ISWC Database
acknowledgements	Acknowledgements in response to transactions above	Expected from the ISWC Database to agencies

File Naming, Transfer and Encoding

File Encoding

All files will be encoded in UTF-8.

File Transfer and Location

The standard for transmission will be the Secure File Transfer Protocol (SFTP). Each ISWC 3rd Party will push files to a 3rd Party specific secure folder in a central ISWC Database public SFTP site and pull files from that secure folder.

File Naming Convention

 ISWC3_ YYYY-MM-DDTHH-MM-SS_RRR_SSS_NNN.json

ISWC3 – identifies an ISWC 3rd party file

YYYY-MM-DDTHH-MM-SS identifies the creation date and time of the file converted to UTC

RRR – Represents the Agency identifier of the receiver of the file

SSS – Represents the submittingPartyId of the sender of the file

NNN – Represents an additional optional descriptor for the file

If a 3rd Party with identifier value of PADPIDA3897722461G sends a file that was created at 18:25 on Nov 25th, 2019 to the ISWC Database Centre (society code 315), the filename would be:

ISWC3_2019-11-25T18-25-43_315_ PADPIDA3897722461G_SampleSubmissions.json

SearchByIswcSubmissions

Requests for the ISWC metadata for the provided ISWCs

Field	Req	Field Description	Field Rules Reference
submissionId	M	Submitter provided unique id for the transaction within the file. This id can be used to tie an acknowledgement record back to its original transaction	
iswc	M	Must be provided for a MetadataQuery submission and must correspond to an existing Preferred or Archived ISWC in the ISWC database.	16,8,9,10,11,17

Field Level Validation

Ref	Description	Business Rules Document Ref
8,9,10	If provided the Preferred ISWC must have length of 11 characters, must begin with a "T" and must match the following pattern: [T][0-9]{10} (TR)	IV/14
11	If provided, the Preferred ISWC must match valid "check digit" as per Annex B of ISO 15707 standard document.	IV/15
17	If provided, the Preferred ISWC must exist in the ISWC database as a Preferred ISWC (TR)	PV/24

Sample

```
"searchByIswcSubmissions": [

    {

        "submissionId": 5,

        "iswc": "T0302332086"

    }
```

SearchByAgencyWorkCodeSubmissions

Requests for the Preferred ISWCs for the provided set of Agency and Workcode values.

Field	Req	Field Description	Field Rules Reference
submissionId	M	Submitter provided unique id for the transaction within the file. This id can be used to tie an acknowledgement record back to its original transaction	
agency	M	Represents the society whose work code is being submitted. Values for this field reside in the Agency Code Table.	3,16

workcode	M	The agencies identifier for the work. The combination of agency and workcode is the information that identifies the musical work in the database of the society that contributed it to the ISWC Database and is used to identify the submission to be queried.	16	

Field Level Validation

Ref	Description	Business Rules Document Ref
3	Agency must be entered and must match an entry in the Agency Code Table. (TR)	IV/10

Sample

```
" searchByAgencyWorkCodeSubmissions": [

    {

        "submissionId": 6,

        "agency": "128",

        "workcode": "R28995187"

    }

]
```

SearchByAgencyTitleAndContributorSubmissions

Requests for the Preferred ISWCs for the provided set of Agency, Work Title and Contributor values.

Field	Req	Field Description	Field Rules Reference
submissionId	M	Submitter provided unique id for the transaction within the file. This id can be used to tie an acknowledgement record back to its original transaction	
originalTitle	M	Original Work Title. Must be transliterated prior to submission.	
interestedParties	M	Interested party associated with musical composition, such as: composers, lyricist, translator and original publishers. Interested Party includes a nameNumber, and/or lastName, and also role fields. In addition, it includes optional name fields.	

Field Level Validation

Ref	Description	Business Rules Document Ref
3	Agency must be entered and must match an entry in the Agency Code Table. (TR)	IV/10

Sample

```
{
    "searchByTitleAndContributorsSubmissions": [
        {
            "titles": [
                {
                    "title": "TI ME KE VRA",
                    "type": "OT"
                }
            ],
            "interestedParties": [
                {
                    "lastName": "PRELVUKAJ",
                    "nameNumber": 375001586,
```

```
                    "role": "CA"
                }
            ]
        }
    ]
}
```

Acknowledgement Record Format

The Acknowledgement record indicates whether the transaction was accepted and provides a status on the transaction that the acknowledgement has been generated for. The acknowledgment will include any error or warning messages associated with the original transaction.

Field	Req	Field Description	Field Rules Reference
submissionId	M	Submitter provided unique id for the transaction within the file. This id can be used to tie an acknowledgement record back to its original transaction	11
originalFileCreationDateTime	M	The creation date/time of the original file that contained the transaction that this transaction applies to as per the fileHeader of that original file.	1
originalSubmissionId	M	The submissionId of the original transaction that this acknowledgement applied to.	2,11
originalTransactionType	M	The Transaction Type of the original transaction that this acknowledgement applied to.	3
iswc	O	Preferred ISWC assigned to the original transaction.	7
originalTitle	O	Represents the original title for the work associated with the outcome of the original transaction.	
processingDateTime	M	The date/time this transaction or file was formally processed by the recipient (typically the ISWC database)	9
transactionStatus	M	The status or outcome of the original transaction. One of: FullyAccepted, PartiallyAccepted or Rejected	10
otherTitles	O	Other titles associated with the musical composition.	
interestedParties	O	Interested parties associated with the musical composition	
errorMessages	C	Details of any errors that occurred with the transaction.	11

Transaction Level Validation

Ref	Description	Business Rules Document Ref

| 11 | Only one acknowledgment is allowed per transaction. (TR) | |

Field Level Validation

Ref	Description	Business Rules Document Ref
1.	Must match the creation date/time of the original file that contained the transaction that this acknowledgement applies to as per the fileHeader of that original file.	
2.	The originalSubmissionId must exist within the file referred to by originalFileCreationDateTime. (TR)	
3.	originalTransactionType must match the transaction identified by referred to by originalSubmissionId above (TR)	
7.	If provided, preferred ISWC must be a valid ISWC Number. (TR)	IV/14
9.	Must be a valid date/time (TR)	

Sample

```
{

    "acknowledgements": [
        {
            "submissionId": 1,
            "originalFileCreationDateTime": "2019-10-01T18:25:43.511Z",
            "originalSubmissionId": 1,
            "originalTransactionType": "searchByIswcSubmission",
            "iswc": "T0302332075",
            "originalTitle": " E NDJEJ MUNGESNN TNNDE",
            "agency": "128",
            "otherTitles": [],
            "interestedParties": [
                {
                    "name": "PRELVUKAJ GENC",
                    "lastName": "PRELVUKAJ",
                    "nameNumber": 375001586,
                    "role": "C",
                    "legalEntityType": "N",
                    "affiliation": "123"
                }
            ],
            "linkedISWC": [],
            "createdDate": "2019-03-14T00:30:16+00:00",
            "lastModifiedDate": "2019-03-14T00:30:16+00:00"
            "processingDate": "2019-11-25T18:25:43.511Z",
```

```
                "transactionStatus": "FullyAccepted",
        },
        {
            "submissionId": 2,
            "originalFileCreationDateTime": "2019-10-01T18:25:43.511Z",
            "originalSubmissionId": 2,
            "originalTransactionType": "searchByIswcSubmission",
            "iswc": "",
            "originalTitle": "",
            "interestedParties": []
            "processingDate": "2019-11-25T18:25:43.511Z",
            "transactionStatus": "Rejected",
            "errorMessages": [
                {
                    "errorType": "Transaction Rejected",
                    "errorNumber": 113,
                    "errorMessage": "ISWC format error [T][0-9]{10}"
                }
            ]
        }
    ]
}
```

REST API

This section describes the changes to the existing REST API required.

searchByIswc

POST /thirdParty/searchByIswc/batch

A new REST API method will be added. This will be a POST method with route
/thirdParty/searchByIswc/batch. The method will take a searchByIswcBatch object and return an
ISWCMetadataBatch object.

searchByAgencyWorkCode

POST /thirdParty/searchByAgencyWorkCode/batch

A new REST API method will be added. This will be a POST method with route /thirdParty/searchByAgencyWorkCode/batch. The method will take a searchByAgencyWorkCodeBatch and return an ISWCMetadataBatch object.

searchByTitleAndContributor

POST /thirdParty/searchByTitleAndContributor/batch

A new REST API method will be added. This will be a POST method with route /thirdParty/searchByTitleAndContributor. The method will take an TitleAndContributorSearchModel object and return an ISWCMetadataBatch object.

The above operations return the result as an ISWCMetadataBatch object which has the following schema.

```
ISWCMetadataBatch ∨ {                                                    ↵
    searchId              integer($int32)
                          A unique identifier for this request. The same identifier will be
                          populated for the ISWC Metadata request in the response.

    searchResult          ISWCMetadata > {...}↵

    rejection             Rejection ∨ {↵
                              code*                    > [...]
                              message*                 > [...]

                          }

}
```

The ISWCMetadata type objects have the following schema:

ISWCMetadata{

createdDate*	**string**($date-time)
	Data and time of creation in the system
lastModifiedDate*	**string**($date-time)
	Data and time of the latest update in the system
lastModifiedBy*	**string**

	Identifier of the last update in the system
iswc*	**string** **pattern: T[0-9]{10}**
agency*	**string** **minLength: 3** **maxLength: 3** A CISAC code of a submitting agency that allocated this ISWC
originalTitle*	**string** Original title of a musical composition
otherTitles	[...]
interestedParties*	[InterestedParty] Interested party associated with musical composition, such as :composers, lyricist, translator, original and sub publishers
parentISWC	**string** **pattern: T[0-9]{10}** A preferred ISWC of a parent of this ISWC. Presence of this field indicates that the ISWC merged to the parent.
linkedISWC	[All linked preferred ISWCs. Presence of this field indicates that those ISWCs merged to this ISWC. **string** **pattern: T[0-9]{10}**]
overallParentISWC	**string** **pattern: T[0-9]{10}** The preferred ISWC that is at the top of the chain of ISWCs.

}

```
InterestedParty ∨ {↵
    name                    string
    lastName                string
    nameNumber              integer($int64)
    affiliation             string
    role                    string
                            The role will be rolled up to the
                            corresponding CISAC Role as per the
                            following mapping: C(C,A,CA), MA(AR,SR),
                            TA(AD,SA,TR) E(E,AM)

                            Enum:
                            ∨ [ CA, AR, SE, PA, ES, AM, SA, C, AD,
                            A, E, AQ, SR, TR, MA, TA ]
    legalEntityType         string
                            Enum:
                            ∨ [ N, L ]

}]
```

3 Non Functional Design

Service Documentation

Developer Portal Updates

The existing UAT (https://cisaciswcuat.portal.azure-api.net/) and Production Developer Portals will be extended to support documentation for 3rd Party Access as follows:

A new "For 3rd Parties" section will be added to the existing home page shown below:
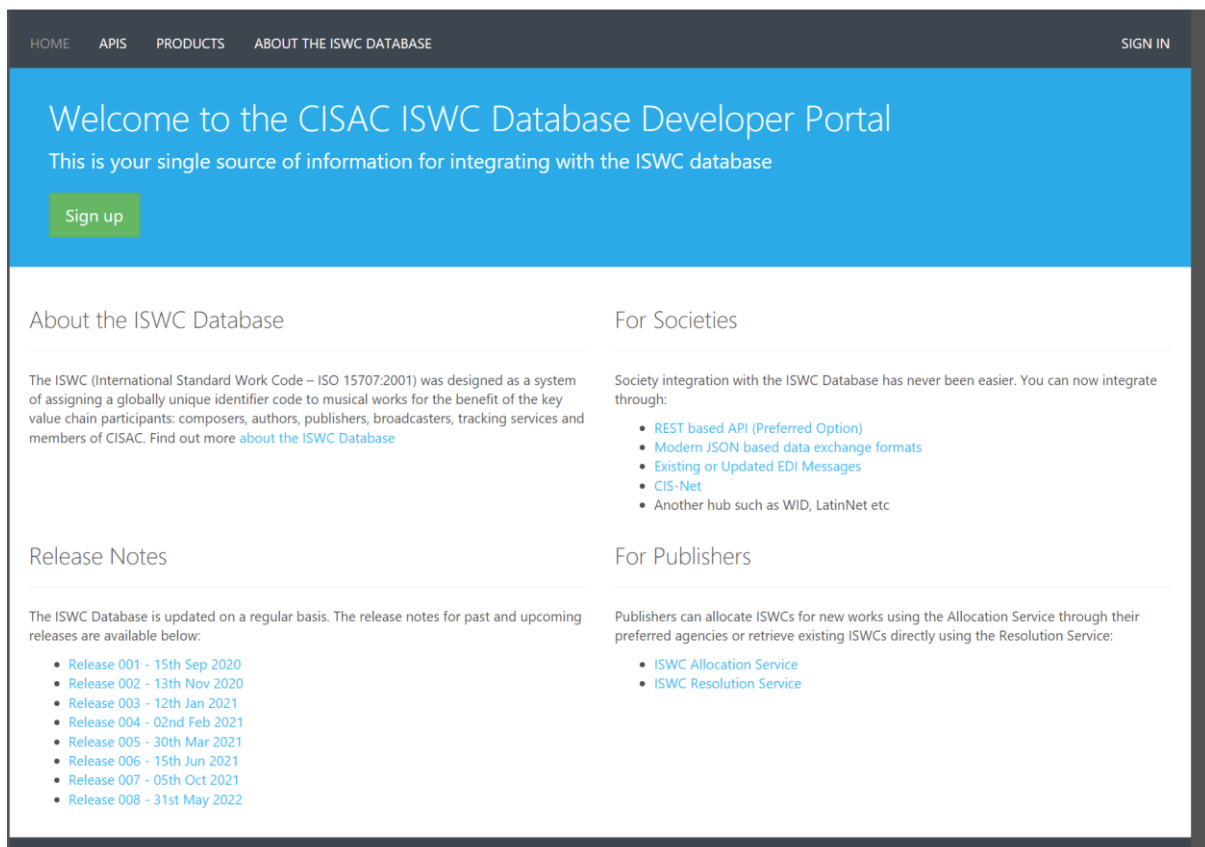
Dedicated "For 3rd Parties" pages for the two supported integration methods will be added, linked to from the home page.   These pages will provide similar details to that provided for

publishers and societies along with the capability to try out the REST API and download of this specification document along with sample JSON files and the supporting schemas.

Specification Document

An updated pdf version of this specification will be made available for download on the developer portal for reference.

Environments

The existing ISWC Database Dev, UAT and Production environments will be reused for this service.

Caching

We will implement caching of ISWC metadata to accommodate the increased number of requests expected by 3rd parties. There will be new container added called CacheIswcs. The CSN hydration Azure Function will be used to populate this container with the latest picture of the ISWC metadata. The id and partition key of the CacheIswcs documents will be set to the Iswc value or the concatenation of the Agency and Agency Work Code. A sample document is below:

```
[
    {
        "id": "T0302332075",
        "IswcMetadata":
        {
            "Iswc": "T0302332075",
            "OriginalTitle": "E NDJEJ MUNGESNN TNNDE",
            "Agency": "128",
            "OtherTitles": [],
            "InterestedParties": [
                {
                    "Name": "PRELVUKAJ GENC",
                    "LastName": "PRELVUKAJ",
```

```json
                "NameNumber": 375001586,
                "Role": "C",
                "LegalEntityType": "N"
            }
        ],
        "LinkedISWC": [],
        "CreatedDate": "2019-03-14T00:30:16+00:00",
        "LastModifiedDate": "2019-03-14T00:30:16+00:00"
    },
    "Partitionkey": "T0302332075"
},
{
    "id": "128R28995186",
    "IswcMetadata":
    {
        "Iswc": "T0302332075",
        "OriginalTitle": "E NDJEJ MUNGESNN TNNDE",
        "Agency": "128",
        "OtherTitles": [],
        "InterestedParties": [
            {
                "Name": "PRELVUKAJ GENC",
                "LastName": "PRELVUKAJ",
                "NameNumber": 375001586,
                "Role": "C",
                "LegalEntityType": "N"
            }
        ],
        "LinkedISWC": [],
        "CreatedDate": "2019-03-14T00:30:16+00:00",
        "LastModifiedDate": "2019-03-14T00:30:16+00:00"
    },
    "Partitionkey": "128R28995186"
}
]
```

The parentIswc and linkedISWC array will be updated every hour by a background Azure Function.

System Access and Authentication

Access to the system will be provided via SFTP for JSON data exchange and 3rd party specific API key for REST API access.

REST API

3rd Parties will be able to request API access through the built-in sign-up process in the developer portal. Separate API keys will be required for UAT and Production.
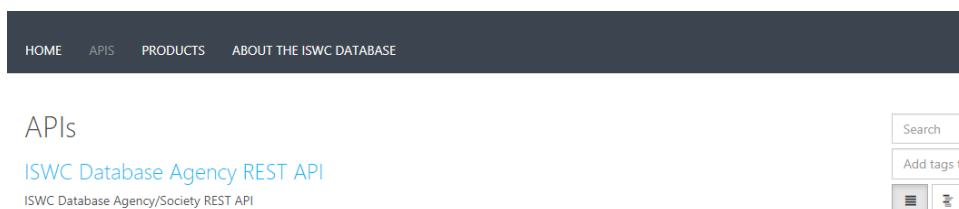
Sign Up Process

1. Sign up and verify email.

2. Go to Products tab and select Third Party product access through High or Medium Band and subscribe.
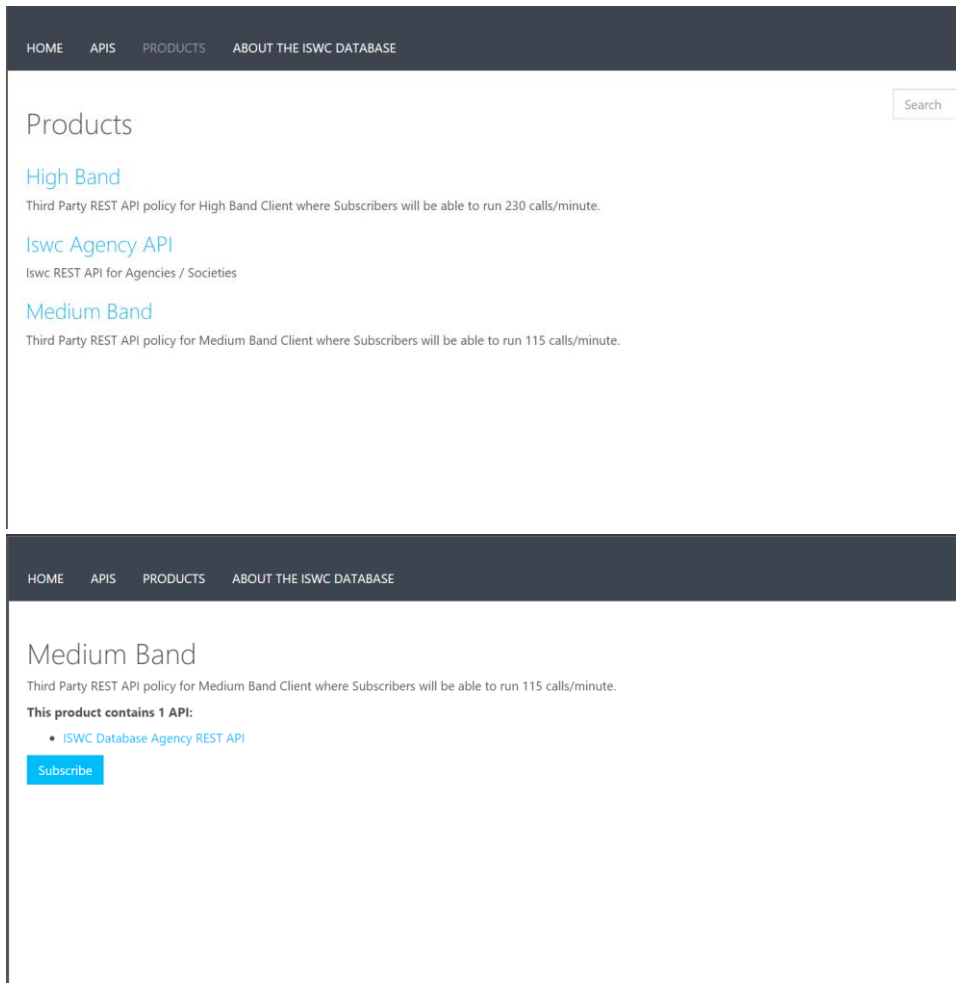
Once the subscription request is approved, you will have access to the 3rd Party API operations:

For your convenience, it recommended to group the operations by "ISWC Third Party Search" so you only see the relevant operations:

Make sure to click the search button once you select this option:

JSON File Exchange

A dedicated sftp account and password will be set up for each 3rd Party that requires JSON file exchange access.   A separate account will be required for UAT and Production Environment.

Request Limits

There are two options for Subscription Keys to be made available:

- The "High Band" option will allow up to 10 million queries per month. The corresponding Request Rate Limit would be 230 queries per minute.

- The "Medium Band" option would be half that of the High Band option (5 million queries, i.e. 115 queries per minute.

Subscription Key	High Band	Medium Band
Queries per minute	230	115
Queries per month equivalent	**10 million**	**5 million**

Appendix A – Open and Closed Items

This appendix provides a tracking list of specific issues/queries raised by the design team during the specification process and how they were incorporated or excluded from this specification:

Open and Closed Items			
Description	Response	Status	Next Action By
Capture ISRC and other 3rd party identifiers as part of the request.	Agreed that capture of ISRC and other 3rd party identifiers should be kept on the agenda for discussions but not part of first phase design document	Closed	
Include Performer information in returned results	The consensus at the ISWC Steering Group was that the ISWC database is not authoritative for this and it should not be included.	Closed	
If the complete title and creator information is supplied and multiple matching ISWCs are identified then it would be useful for 3rd parties if the system returned all matching items rather than returning none. E.G. If the search title and contributors are "Dancing Queen" and "ulvaeus","anderson","andersson" then there are three matching ISWCS (T-000.000.001-0, T-916.993.920-2, T-000.006.443-6)and based on current defined logic none would be returned.	Steering Group agreed that for this phase the design should remain as is with no result returned if more than one match found.	Closed	
Creator Count. Current logic includes creator count as a match requirement. I.E. Submitter needs to provide complete set of creators. Consider returning a match if exactly one ISWC found even though the creator count of	Agreed to review this for a further release considering the potential for unintended consequences that may reduce the match results.	Closed	

the matching work is greater than the count of creators supplied as search criteria.			39
Include description and mapping information for rolled up roles.	Included in the "General Rules for Interpreting Information Returned" section.	Closed	
Include link to Agency Code / Agency Name lookup information	Added to "Input" part of searchByAgencyWorkCode section.	Closed	
Investigate and clarify if the LinkedISWC array contains all ISWCS merged into / replaced by the current ISWC at all levels through the merge hierarchy or if it is only showing the ones that are directly merged.	It shows the ISWCs that are directly merged into the current ISWC.	Closed	
Investigate if it is possible to provide a separate first name field in returned results.		Open	John C.
Include Society Work Codes in returned results	Agreed these won't be returned.	Closed	Sylvain P.
Clarify if role code is needed in searchByTitleAndContributor and identify how it is used	Clarified this in "Input" part of searchByTitleAndContributor section.	Closed	
Document expected use cases for functionality proposed	As part of the document review process ask 3rd Parties to include in their feedback information on how they will use each of the operations proposed and for what purpose.	Open	John C