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# PARRY

## n e w s

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An Occasional Newsletter from Parry People Movers Ltd (PPM)  
 Intermediate Technology Workshops (ITW)  
 Pre Metro Operations Ltd (PMOL)

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[www.intermediatetechnologyworkshops.com](http://www.intermediatetechnologyworkshops.com)

[www.parrypeoplemovers.com](http://www.parrypeoplemovers.com)

### £20m LIGHT RAIL INNOVATION CENTRE PLANNED FOR BLACK COUNTRY Dudley's unique role in Light Railway Development Recognised by National & European R & D Funders



Illustration: Dudley MBC

The original idea to create the Centre was conceived by Parry People Movers during high level discussions with Network Rail, is now led by the Warwick Manufacturing Group, part of University of Warwick. The new DfT national body that is allocating R&D finance to the railways, Future Rail, the BIS Department/Local Enterprise Partnership, Centro and Dudley and Sandwell Councils have joined forces in a £20 million plan to create the Centre which will be located in a modern science park development adjacent to the old Dudley Town Railway Station.

The new Light Rail Innovation Centre (illustrated) will be an important stepping stone in introducing to the public

transport industry new modes of passenger railway that are *intermediate* between heavy rail and local buses, - new forms of light railway.

The commitment has been long term. 21 years earlier PPM had set up its first operating light railway in Dudley's Himley Park. This served as a base for sending flywheel-powered vehicles to perform working demonstrations in several urban centres; Birmingham, Barking, Brighton, Swansea and Bristol. These proof of concept demonstrations led eventually to the successful Stourbridge service. The Branch line trains are run by London Midland with the operation sub-contracted to Pre Metro Operations Ltd, also based in Dudley Borough.



Still in working order an example of 100 year old single-decker tramcars which once ran between Dudley & Cradley Heath



PPM Car 6 in operation on specially built narrow gauge line at Himley Park in 1993 where it carried over 50,000 passengers



PPM built Class 139 hybrid flywheel railcars now running on the Stourbridge Town Branch line providing 7 day a week service since 2009

### REPEATING A VICTORIAN INITIATIVE: CREATING A NEW CATEGORY OF LIGHT RAILWAY

*Pre-Metro Operations and Parry People Movers join forces to respond to opportunities emerging in several regions of Britain.*

Access and circulation problems in urban and rural areas in South Wales, Yorkshire, the Midlands, East Anglia, South West and South East England suggest revival of the approach of the 1896 Light Railways Act but with the emphasis this time more on passengers than freight.

In the late Victorian era the economies of rural areas of Britain were struggling due to the lack of connectivity – Despite the railway building ‘mania’ of earlier years, whole areas of the country still lacked easy access to rail lines because the necessary engineering to carry the heavy locomotives that ran on them made standard methods of construction too expensive. With food stuffs being produced in large scale farming in Canada, Australia and Argentina and fast efficient railways connecting ports with the rapidly expanding cities, British farms could not compete where there were no railway lines nearby and the other means of moving goods, horse-drawn wagons or steam traction were uneconomical.

Perceiving the need for an *intermediate mode* in 1896 the Victorians enacted legislation to permit the building of light railway lines, some narrow gauge which were far more economical to construct than the main rail network which had spread to all the main towns and cities of the land. Over 40 of these came into being.

The same lack of connectivity now applies to people living in areas which depend on taxis and buses to reach stations on the much reduced national railway network., a lower cost rail mode is required. The Stourbridge branch is the template. A solution with a slower, simpler and lighter form of railway than the main network.



John Parry

For most people because the Law is the Law is the law, it is the rule breakers who are the troublesome ones whereas the rule makers bring order where there was confusion.

But not always. Long, long ago when I still thought things were black and white. I went to see a film, the true story about Glenn Miller, the band leader, who was a rule breaker. In 1943 after being enlisted into the US Army, Miller was given the rank of Major in charge of a military band. A memorable moment in the film was during a Passing Out Parade in front of a senior general. Having stood around for a long time, the troops were fed up. When they began the March Past they were clearly demoralised. Miller had an idea to brighten things up and ran across the parade ground, (a serious breach of protocol) and took over the baton. He switched the tune to St Louis Blues played in march tempo. The troops loved it, and marched briskly.

Major Glenn Miller Breaking the Rules  
(Played by James Stewart)

Miller however was in trouble, and in the process of being disciplined by his commanding officer, the General burst in to congratulate them both for transforming the parade by playing an upbeat tune. The Rule Breaker had saved the day.

At university, being radical and active I became Chairman of the Labour Society. We did lots of things, fund-raising, participating in the Carnival, demonstrating to Parliament against the Invasion of Suez and persuaded the Transport Minister, Barbara Castle to visit to address an evening meeting.

And then the Society gained a new recruit, a mature student, who had been a member of the Electricians Trade Union. His name was Ted Faulkner and he knew exactly how left wing organisations should operate. We began the meeting which Ted first attended, and were about to start planning the next activity... 'Point of Order, Mr Chairman. Does this organisation have Articles of Association? No? Then how do we know if we are conducting ourselves legally? What are the Committee's responsibilities? Quorums at meetings? Keeping orderly records etc. Of course Ted had a point.

The next six months meetings of the Society concentrated on Constitutional issues. Different versions of society rules were argued over and committee members' responsibilities examined and defined. But the number of supporters began to dwindle and the most active and enthusiastic moved away to more interesting things. The Rulemaker had seen that things were now ordered correctly but he actually broke the spirit of the organisation. Meetings took to Monty Python-style squabbling over status and definitions. 'Doing' had stopped and I quietly slipped away.

It goes wrong when a rule becomes bigger than the reason why that rule was made in the first place. When the first self propelled vehicles arrived on the roads their brakes were rudimentary, and other road users caught by surprise by a vehicle which could move on its own without being drawn by horse or ox. A law was quickly passed in 1865 and stayed in force 30 years requiring men with red flags to walk in front of moving motor vehicles long after carmakers fitted adequate brakes and the public had become used to the new mode. But this is the time when the enforcers of the rules have their easy pickings. A rule has outlived its usefulness or extended outside where it seems reasonably applied and people are tempted to break it. As a boy I recall the rage of my normally mild natured father who was repeatedly fined for not stopping at a Halt sign when riding his bicycle.

His misdemeanour occurred several times when he worked for the LMS Railway and set off home at 5:30 am when the streets were totally empty. A policeman took to hiding behind a pillar box and leap out and charge my father if he did not stop completely before entering the main road. The Law was the Law., common sense did not apply.

Another bicycle rider, Dr T.F. Wright, my uncle on my mother's side, an historian, died at the age of 93 just before Christmas. He was formerly one of the directors of JPM Parry & Associates Ltd at a time when the eminent journalist, the Hon. David Astor, while President of Intermediate Technology Development Group was also on the board



A Younger Dr T.F. Wright on a BSA Bicycle

of JPA. David as Editor of the Observer Newspaper had once faced a dilemma when in 1958 he believed the British Nation under Prime Minister, Anthony Eden had done wrong by invading Egypt over Suez. When the Nation is at war, national newspapers should not propagate the opposite view. But few people now doubt that David was right to take the stand he did, but he was in trouble at the time for breaking the rules.

Uncle Frank Wright helped to change history in a different, smaller and less controversial way getting across to me a clear insight about the role of transport in urban development. I was someone deeply into the construction side of international development in the mid 1980's the Overseas Development Administration (the predecessor of DFID) commissioned me, together with my colleague Andrew Gordon, also a JPA director to write a book about upgrading the slums and shanty towns of third world cities. This was to be Britain's contribution to the UN International Year of Shelter for the Homeless in 1987. 'Shanty Upgrading' was published by Intermediate Technology Workshops, a subsidiary company of Parry Associates.

I knew my Uncle, an Economic Historian, was expert in the evolution of modern towns and cities in Britain and had even been made freeman of Chesterfield having written a book on the town's development. Almost as an afterthought I asked him if there was anything that could be learned about the upgrading of British slums in the 19th and early 20th century that might be useful for the Shanty Upgrading narrative. Frank being someone who could see both the wood and the trees suggested to my great surprise that I should take a look at the role of trams. Whilst railways tended to concentrate activities around key goods yards and stations, trams were better 'distributors'. Effectively a cheap form of rail transport breaking all the rules by lightness of construction, they made it possible for urban workers to ride to their work places rather than walk. This enabled them to live further away and provided the opportunity for working class suburbs to be built on cheap marginal land outside the city, The uplift in the value of that land paid for the cost of building the track.

This is how the low cost People Mover project was born.

Thank you uncle Frank, David and Andrew.

# INTERNATIONAL ROUNDUP

## MIDDLE EAST ASSESSMENT

**Ian Hamilton visits a very different world dominated by the private car.**



Taking advantage of a generous allocation of finance by an infrastructure contractor bringing him out to the Middle East in a trip extending from 15th March to 21st March, PPM's Business Development Director, Ian Hamilton was able to familiarise himself with the effect on urban areas of growing prosperity coupled with lack of public transport infrastructure, just a matter of time until the main areas become overwhelmed with traffic.

The focus of attention of this particular

**For Middle East customers PPM are offering special climate-adapted versions of its light railway vehicles. When built with long, low centre sections passengers will board at kerb-height rather than platforms. With sub-divided compartments and air conditioning to suit local cultures and conditions the PPM 120 will be fully fit for purpose**

visit, undertaken for, what for now must remain an unnamed client, who has visited Stourbridge and been impressed by the PPM system, is a circumstance which occurs quite frequently in the cities of the region: summer months does not favour walking or cycling outdoors.

The client, a large university is considering which internal transport system to adopt and will announce its decision before the end of April. PPM's counterparts experienced in building ports and highways have joined forces with an accredited railway contractor and an international permanent way supplier.

Parry People Movers competing against trolley buses see the application as requiring the affordability of its intermediate mode, in effect a light tramway without wires, and for the system to be arranged as 'loop and link'. The 'Link' to be to a car park and public transport interchange off site, and the 'loop' based on a circulatory system calling at all main faculties and departments.



## NEPALS LAST RAILWAY

### WHAT A WASTE!

In 2014 the staff who worked on the cross border Narrow Gauge railway operating from Jaynagar in Bihar State of India to Janakpur in Nepal, learned of the decision by the Nepalese proprietors that the line must be closed. This was to make way for a major new line built to Indian Broad Gauge which may eventually form a component of a fast international line linking China to the east and India's national railway system to the west.

An inevitable milestone in the long march of progress. Not for everyone...

Heavy fast rail systems tend to cut through the countryside paying little regard to the economy and society alongside the tracks.



**No Shortage of Patronage**

The 'little train' may be seen as performing a different role. Fully integrated with the lives of the surrounding community enabling local trade, employment and social activities to take place over a considerable linear spread. As was discovered in Sierra Leone, remove the railway and the complete hinterland may become disconnected from the centre and alienated.

**A No Frills Light Railway as an Intermediate Transport Technology. Page 7**

## CHILEAN NATIONAL RAIL REVIEWS OPTIONS



**Current Chilean railcar**

Three representatives of Chile's Rail company visited Stourbridge on 01-03-15. They were in Europe to look into the purchase of 3 new railcars for a metre gauge line in the foothills of the Chilean Andes. The line serving both locals and tourists, runs from Talca to the west coast port of Concençon.

## PROGRESS CONTINUES IN MALAYSIA DESPITE RECENT DIFFICULTIES FOR THE NATION

An unusual sequence of harsh setbacks involving loss of two airliners from the national carrier and a flood disaster have caused major preoccupations for the Malaysian authorities in recent months. Nevertheless following a very successful visit from a delegation of top officials in the Autumn of 2014 PPM's local counterparts D'Tram have continued with talks with the authorities at different levels and are increasingly optimistic over the outcome. One project is moving forward in a heavily trafficked corridor inevitably applying conventional super-tram technology but scope remains for several smaller scale systems which suit the

PPM mode. It is premature for any announcement to be made but the good efforts of the collaboration between PPM and D'Tram over the last 5 years, while not generating any tangible returns, as yet, are continuing with prospects of helping to reduce urban traffic congestion.



**Prime Minister Datuk Najib Abdul Razak inspecting the flood disaster in Kelantan**

# IT'S ALL PUBLIC TRANSPORT!

*Or should be... The artificial division between people travelling with a purpose or for pleasure is challenged by PPM's change of strategy.*

Riding up the hill to Union Square from Fisherman's Wharf in San Francisco there will be tourist visitors to the City, but for much of the day most of the people on board are local citizens on the way to their work or rushing between business meetings. It doesn't seem to matter to routine users that their conveyance is a historic trolley-car. It gets them there!

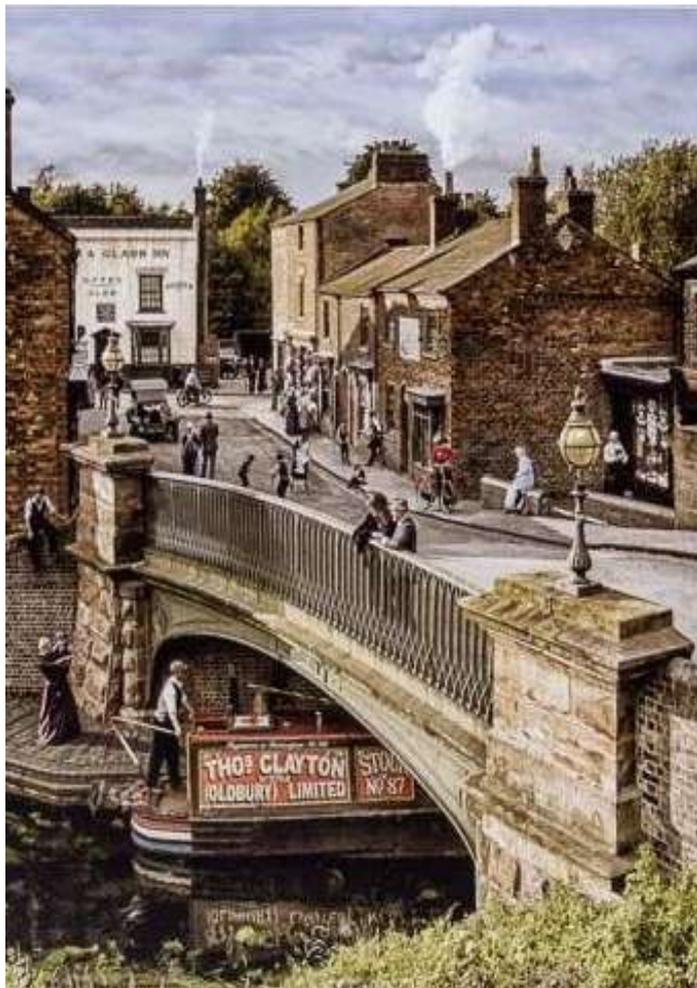
The Metropolitan Borough of Dudley in the Black Country chosen as the site for the ultra modern research and development centre for low carbon light rail technology, has also begun work on re-establishing passenger rail services between the old Dudley Town Station and West Coast Main Line at Dudley Port, four miles to the east.

Adjacent to its town centre Dudley has a famous Castle and Zoo and one of the main venues that celebrate Britain's industrial heritage, the Black Country Living Museum. The new connection to the railway net



**Efficient Public Transport San Francisco-Style**

work bringing in visitors to these attractions while, for local people, getting to Birmingham or Wolverhampton will become quicker, cheaper and more convenient. In due course the line, which like the Stourbridge branch, will be operated by a shuttle service, will be even busier and require not only larger railcars, but have more than one in service.



A proposal put forward by Rail Preservation entrepreneur, Jane Taylor links the visitor and commuter traffic. Why not provide a modern, environmentally responsible service but create a 'Retro' style of railcar? Instead of transferring at Dudley Port to a sleek, glossy post millennium carriage, there waiting will be a visual replica of the Great Western Railway AEC railcars which originally entered service in the 1930's. With the new self-contained flywheel-hybrid bogie, Parry People Mover railcars can accommodate any styling of coachwork required by the Train Operating Company customer. An historic outline worth considering?



**Jane Taylor**

Preserved railway companies throughout Britain will accordingly be given the opportunity to bring in public transport services based on reliable, low operating cost rolling stock that fits in with the context of the early part of the last century, which is the basis of their volunteer interest and visitor attraction.



**AEC Park Royal works unit Railcar now at Swindon Railway Museum of the GWR**

The vision of reinstating a train service in Dudley using a developed form of the popular 'Stourbridge Shuttle' railcars caught the imagination of the editorial team of the local weekly newspaper, the Black Country Bugle. Their request for information resulted in a changed front page of the March 5th issue. Like many people in the locality the Bugle relishes engineering achievement and references to its proud industrial history.

# Black Country Bugle



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## New plans to bring back historic trains

DUDLEY town, with a population of around 200,000, is the largest town in the UK without a direct rail link. There may be several stations nearby, but there has not been a train station in the town centre for over 50 years.

That could be set to change, with not one but two proposals to reconnect the town with the rail network.

In December 2014 Dudley Council unveiled a proposal for a light railway to connect the old Dudley station site with Dudley Port. But now there is a second proposal that could see historic replica trains running into the town.

This alternative plan comes from Ecorail Limited and Parry People Movers, the designers and builders of the successful "Stourbridge Shuttle".

Parry's have designed a

By Dan Shaw

longer, bogie version of the Flywheel Hybrid Stourbridge Railcar and they have designed a body for it that recreates the iconic GWR railcars that were once a common sight in our region.

The GWR railcars, nicknamed the "flying banana" due to their cutting-edge aerodynamic styling, were often seen running on the Stourbridge to Walsall railway and especially the Walsall to Birmingham via Dudley route. Research and photographic evidence suggests the Walsall to Birmingham Snow Hill service via Dudley was for some time almost exclusively served by these railcars.

In a statement, Jane Taylor of Parry People Movers said: "Ecorail Ltd and their partners



The GWR railcar, once a familiar sight on Black Country tracks.

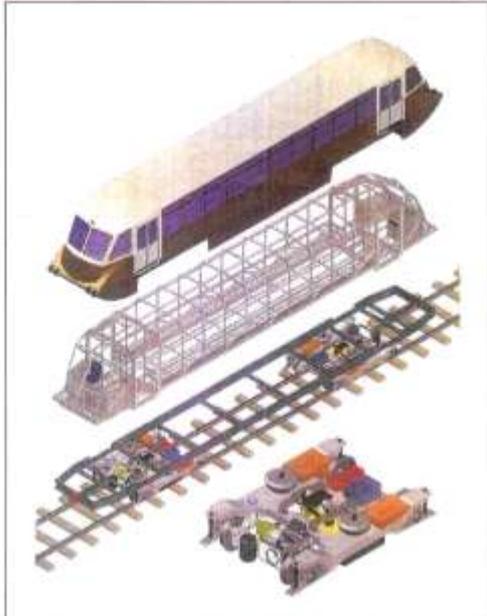
have a viable train and novel business plan that could have the one mile Blowers Green to Dudley section open with demonstration trains running within the year. With Ecorail's match funding capability on investments, the proposal is to make this a true 'community railway' by paying volunteers in shares to clear the tracks, etc. It also proposes to create a

cycle way along the length of the track on the embankments, suitably fenced off from the railways, and install cycle storage capacity on the trains.

### Partnership

"This partnership proposes that these railcars are used and where possible the stations are recreated in the GWR style, so that it is a working, privately run 'community railway' yet also a visitor attraction at the same time, including the promotion of a spur on the remnant of the old Wolverhampton line to serve the Black Country Living Museum, Zoo, Castle, Archives, plus the Priory Park housing development and Guest Hospital."

The original Dudley station opened in 1860 but closed to passengers in 1964 as part of



The proposed PPM railcar with GWR inspired body

the rationalisation programme that has gone down in history as "Beeching's Axe" after the then chairman of British Railways Dr Richard Beeching.

The Dudley station site was redeveloped into a freightliner terminal, opening in October 1967. That closed in September 1989, although traffic from Wednesbury to Round Oak continued until 1993.

Much of the old railway infrastructure and track-bed from Dudley station to Blowers Green and beyond is still in place, although it has been reclaimed by nature, and sites such as the Dudley tunnel

are popular with "urban explorers".

Over the years there have been several proposals to reinstate the line into Dudley, the lack of a rail connection being seen as a factor in Dudley's failed bid for city status in 2012.

● Would you like to see train services to Dudley restored? Do you like the idea of historic replica trains? Let us know what you think, write to us at *The Bugle*, 41 High Street, Cradley Heath, B64 5HL, email [editor@blackcountrybugle.co.uk](mailto:editor@blackcountrybugle.co.uk) or log on at [www.blackcountrybugle.co.uk](http://www.blackcountrybugle.co.uk)



Much of the infrastructure, like Blowers Green station and the Dudley tunnel, is still in place

Revealed - match ban for Wolves boss Cullis - See page 31

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## A COMMUNITY OF COMMON PURPOSE ORGANISATIONS IN LIGHT RAIL OPERATION & INNOVATION

Four organisationally-separate companies occupy roles and responsibilities in the embryonic industry which is emerging. They are treating the official decision to create a technical centre in Dudley backed by public funds from local, regional and central government sources as a validation of endeavours which up until now have depended primarily upon millions of pounds of private investment. The two organisations that maintain closest mutual links and customarily are used to working in collaboration are:-

- **Parry People Movers Ltd (PPML):** holders of the formal intellectual property, patents and designs, with the experience and knowledge of its directors and senior staff built the two operational railcars in service and one part-owned by Lightweight Community Transport. This is currently being prepared for demonstration service.

- **Pre Metro Operations Ltd (PMOL):** a licensed train operating company since 2005, from May 2009 responsible for operating an intensive nationally-timetabled branch line train service 7 days a week.

The way that the above two separate companies though with different directors, operating bases and staff working together has been defined in a statement by PMOL and agreed by both boards.

*"PPML is now working closely with PMOL to progress mutually beneficial light rail opportunities. Such opportunities will involve both companies in seeking to influence the direction and success of the Dudley Innovation Centre proposal whilst building upon the operational successes achieved at Stourbridge.*

*"In order for the two separate companies to expand their sphere of operation they will be mutually looking to develop larger and more efficient Railcars and will, in particular, be attempting to ensure that the bidders for future rounds of franchised rail operations are well aware of the excellent performance achieved by the Class 139 Railcars at Stourbridge and the on-site operational and maintenance experience so gained. The two companies will also be exploring the opportunities to introduce the Stourbridge experience to other areas where the need for a rail based transport solution has been identified."*

- **Lightweight Community Transport LLP**

LCT was formed following an approach to a 'green' funding body by PPM pointing out the need for an environmentally-concerned public transport promoter with particular skills that were applicable to the re-opening of rail lines such as those closed the Beeching railway restructuring plan. LCT has since raised capital from private shareholders.

Since formation, LCT has devoted much of its efforts to preparing a suitable vehicle with which to demonstrate the benefits of light rail type services using low carbon traction technology. A project is well advanced refurbishing and upgrading a 50 passenger railcar that was previously the prototype for the 'Class 139s' which are now in operating service on the rail network in the West Midlands.

## THE NEPAL RAILWAY A LIFELINE FOR THE COMMUNITY

The decision to close the narrow gauge railway in Nepal could be catastrophic for the communities along the line as can be illustrated by images taken from a BBC documentary film. The fundamental conclusion is that what had made it difficult to keep going reliably could be solved by an alteration in the technology. The documentary shown on BBC 4 is No. 2 in the series 'India's Border Railways' 'Last Train in Nepal'. See also Page 7



Much is revealed in this picture showing in a heavily overloaded train on a meandering track (which at one time was straight). The mysterious twisting arises gradually as a result of the 'hunting' motion of the heavy locomotive striking the gauge faces of first the left rail, then the right one. Gradually pushing the whole track sideways. In the end the deflection becomes so severe that there was a derailment, a quite regular occurrence.



The railway's own permanent way gang were perfectly able to put the track right using simple equipment. With track workers earning only £2 a day, a couple of gangs providing continuous attention to keeping the track straight will barely affect the railway's operating costs while greatly improving safety and efficiency.



Light Self-Propelled Railcar

Change the rolling stock to simple light self-powered carriages with axle loads less than a fifth of a locomotive then track damage will be greatly reduced. The new type of railcars will be cheaper to maintain and perform the journeys more quickly especially on an improved track. The speed could be increased to 25 mph instead of 10 mph, enabling very much more frequent services, six times a day instead of one train every two days.



With the narrow gauge train no longer running, commerce still finds a way of continuing the trading of goods, and so the bicycle couriers, possibly former railway employees have resorted to the exhausting and inefficient task of slinging the maximum possible loads over the saddles and crossbars of bicycles and wheeling them alongside the now disused railway tracks.

- **Ecorail Ltd**

Recently arrived on the scene at Cradley Heath is a railway reinstatement specialist Ms Jane Taylor who has over recent years concentrated her efforts on promoting the reopening of branch lines in South West England. Prior to contacting PPM in 2013 Jane had already identified that changes in government finances available to local authorities were having a severe impact on the ability to travel in Devon and Cornwall of people who did not have ready access to a private car. Unlike many areas of Britain the South West has very few local railways and so people depended on bus services for routine local journeys and taxis where no bus service was available. Bus operation has suffered from the vicious circle of low service frequency resulting in poor levels of patronage, and so was particularly dependent on generous subsidies which ultimately come from Central Government. The full extent of the Recession began to bear down in the period after 2010 and subsidies were cut which has caused further reduction in bus services. There is also a seasonal factor – traffic generated by extra visitors clogs up the narrow local roads making bus services unable to keep to time.

Jane's background having run a taxi firm in the Home Counties provided her with an understanding of the factors that make up the cost of running a public transport facility which could readily translate to larger vehicles.

However because of the adverse factors already impacting on bus services she looked at whether anything could be done about reinstating rail services on previously closed lines. Her father had once been a signalman on the Great Western Railway giving access to considerable knowledge about the culture of the local railway both present and earlier routes. A factor which does not apply to buses and coaches is the prospect of incorporating volunteer labour and other resources from the local community to help bring a rail service into being and keep it in operation. However mitigating against establishing high frequency services which she saw as the source of higher patronage was the fuel consumption and high maintenance costs of conventional railway vehicles.

During research, it was in the Autumn of 2013 that she first discovered what was being achieved with the PPM Class 139 lightweight railcars at Stourbridge. In particular the hybrid and brake energy recovery innovations have resulted in extraordinarily low fuel consumption while the incorporation of automotive engineering into the bodies and mechanical drivelines make it possible to maintain the vehicles on the lines where they operate at a far lower cost. This understood, Jane approached PPM to investigate whether it was possible to join forces combining her ideas to promoting community-based railways with the Parry approach to lightweight low-cost engineering and the 'intermediate mode concept'.

## RELAUNCHING THE INTERMEDIATE TECHNOLOGY VISION Enhancing The Role of Designers & Engineers in Poverty Alleviation

An issue troubling the exasperated designers and engineers with world-beating flair who feel that they do everything right except find sufficient money to implement their ideas, is how to access the market. Patient money is a rare commodity; without patient money an innovative enterprise becomes a Scott of the Antarctic rather than an Edmund Hillary. It's not just the money that matters, it's the orientation and motivation of the Aid business. Adverts show children starving or shivering with cold. The generous public's reaction is to send money for food or a woolly hat and gloves. This tactic is effective, bringing in the donations (Just text 'hat' and we'll take the £3.00) but hardly help in the long term. Many international development charities perpetuate the impression that the best tactic for the World's poor is just to ask for money.

If the money doesn't come and conditions are desperate, people look for the means to reach somewhere that there are incomes to earn - even if thousands of miles away, including in Britain. Mass immigration from poor to rich nations is not a solution either. Thousands of would-be migrants drown or die of cold or starvation en route to the promised land but being stuck in a transit camp in Calais is hardly a worthwhile attainment.

The motivation behind reinvigorating the Intermediate Technology vision comes from the fact that entrepreneurs are active and business taking place even in the humblest shanty settlements. Carefully judged trading decisions or work activities are the source of long term resilience. But where are the well-designed tools and equipment which facilitate converting local materials including waste products into items of value? Where are the ideas for new transport devices which increase the efficiency of delivering foods and materials reducing their price in the market? Or the devices that turn sunshine into saleable energy.



**Shanty town micro-enterprise phone charging service photo courtesy of the Economist magazine**

### ITW Picks up the Baton

Dr E.F. Schumacher's objective in setting up the ITDG in the late 1960s was to divert some of the design and engineering skills available in our own country to create better solutions for people in poorer societies. A better wheelbarrow or a means to conserve the heat from the sun to cook a meal in the evening, or break rocks to produce gravel. But policies change and in line with those of many of the international development charities, the subsequently renamed ITDG, now called

Practical Action, is not averse to dealing with private sector firms as a source of financial support, but insists on its charitable funds to be spent as far as possible only in the beneficiary countries. This tends to rule out the commissioning of product design and engineering services offered by private sector firms. While in line with views of the typical member-of-the-public donor, such policies may unintentionally deprive Third World entrepreneurs access to some of the flair and skills of the most talented designers. ITW intends to put that right.  
[www.intermediatetechnologyworkshops.com](http://www.intermediatetechnologyworkshops.com)

### Parry Building Products

As fall out from the event of July 8 2013 when Parry Associates was forced by the High Court to cease trading, a new company, Parry Building Products Ltd has been created by two brothers Oliver, a former JPA employee, and James Glendenning. Their agenda is refreshing, to take up the best available intermediate technology designs and use orthodox sales and technical support measures available to achieve take up in the market place. Current reports indicate consignments of equipment going out to Uganda, Somalia, Ethiopia, Nigeria, the Cameroon and Bangladesh and negotiations ongoing with organisations in Sierra Leone, Ghana, Haiti, Rwanda and Papua New Guinea.

[www.parrybuildingproducts.com](http://www.parrybuildingproducts.com)

### Build IT International

Because of Zambia's need for a competent school-building organisation using well-made, locally-produced elements such as roofing tiles, Parry Associates took the initiative in 2005 inviting a group of well-qualified publicly-spirited individuals to undertake the responsibilities of Trustees to form a charity, Build IT International Ltd. The IT in the charity's name is a deliberate double meaning - the IT referring to Intermediate Technology. Squaring the circle, BII are now working with Parry Building Products to reassign still workable equipment into the hands of private sector producers so they can become suppliers to the charity's school building activities. BII's website describes an impressive record of building new classrooms and upgrading existing ones throughout the length and breadth of Zambia.

[www.builditinternational.org](http://www.builditinternational.org)



**'Knapping rocks' a frequent cause of damage to fingers and eyes**

## VANUATU CYCLONE CONFIRMS CASE FOR IMPROVING CONSTRUCTION TECHNOLOGY IN VULNERABLE ZONES

Newsreel footage from the South Pacific shows evidence of yet another 'climate change' disaster of exceptional severity destroying complete settlements.

The relief agencies will provide plane loads of blankets and tents but from past experience nothing will be done to improve the standards of



construction to provide greater resilience in the future. Resilience can be obtained at two levels.

The intermediate technology solution introduced into Mozambique where a flood disaster caused great loss of life in

2000 was to help local counterparts build High Schools raised on columns so as to provide communal refuges should there be a repeat of the flood disaster. The ideal



means of achieving resilience would be a roof design which will be better able to withstand extremely strong winds e.g. A dome. ITW believes a means can be devised for building these rapidly and economically.



**Cyclone proof roof for exposed zones**

## A NO FRILLS COMMUNITY LIGHT RAILWAY

If you have not seen the recent BBC Documentary film 'Last Train in Nepal', it can be viewed on [www.youtube.com/watch?v=00wcrIFzFsc](http://www.youtube.com/watch?v=00wcrIFzFsc)

On learning of the tragic and possibly misguided decision in 2014 to close the cross border narrow gauge railway line which ran between Janakpur in Nepal and Jaynagar in India, ITW/PPM and Ecorail have decided to produce a pamphlet to explain the economic, social and environmental benefits that could derive from such an asset if reintroduced in modernised form. A technology could become generally applicable in other remote regions of the world. The document will describe features such as lightweight rolling stock and permanent way, local production of energy (solar and biodiesel), brake energy recovery and techniques for community participation Should you be interested to receive a copy of this document, please download and return the form which accompanies this newsletter.

**Jane Taylor Ecorail/PPM/ITW**

# EXAMPLES OF PROSPECTIVE INTERMEDIATE MODE LIGHT RAILWAY SCENARIOS FROM AROUND THE REGIONS OF BRITAIN

There is no shortage of interest in expanding the coverage of passenger railways in Britain. The economic benefit from being on the railway map is obvious because of the premium that proximity puts on house prices and the stronger economic performance of city regions which have the best suburban railway and tramway connectivity. PPM and PMOL receive expressions of interest every few days. The examples shown below display a variety of contexts.



**View of Dudley From The Castle**

Since Beeching 'reshaped' the railways the historic Borough of Dudley has had no town station. Stourbridge Junction 4 miles to the West is connected to the edge of Dudley by a lightly used freight line and so can be relatively easily be given the all important connection to the rail network. Ideally the link would reach the West Coast Main Line, but with the two track freight line available the westward route can be established more quickly.

## A NEW FORM OF LIGHT RAILWAY

- Railcars less than half normal DMU weight
- Plain, not electrified, track
- Slow line speeds, simplified rules
- Low wear and tear of the track
- Low Carbon from hybrid driveline
- Managed like a bus or taxi firm
- Engineering part rail, part automotive



**London-Bound and Heritage Trains Meet At Cholsey Station**

The pleasant Thames Valley Town of Wallingford once had a branchline connection to the mainline into Paddington, but this is now exclusively used, mainly on Sundays by a volunteer run preservation company. If a shuttle service were introduced to Cholsey which has mainline stopping trains, Wallingford residents would avoid the expense of driving to, and parking at Didcot which costs over £6 pounds on a week day.



**Wisbech a Fenland Market Town**

Wisbech, despite the prosperity of nearby Cambridge and Peterborough suffers from lack of connectivity by public transport. Especially as it cannot share the benefit of swift and frequent services from March Science Park. House prices and rates are very low compared with Cambridge, were there a rail connection, Wisbech would be a good place to commute from. A lively rail service reinstatement organisation, 'the Bramley Line' is campaigning to get passenger services reinstated.



**A Railway Station Without Trains**

Putting Oswestry, Shropshire back on the Railway Map will transform the town's image. The former grand station above showing how important the former rail link once was, to the main line at Gobowen. There is an active local volunteer run heritage railway business already running weekend trains and the directors are keen to establish the main line connection. The local volunteer run company is working on a plan for an interim short service to run from Gobowen to a halt next to a large orthopaedic



**Don Valley South Yorkshire during a rare visit by an excursion passenger train**

Rapid progress was being made towards meeting the aspirations of the people of Oughtibridge and Stocksbridge to be connected by rail to Sheffield. Tata Steel have land available for development giving additional incentive for a passenger rail connection to be established using an existing lightly used freight line. Proposals for railways in the area involving a new link to Manchester may need part of the same stretch of line. If this happens the intermediate mode service will terminate at Deepcar.



**Folkestone Harbour**

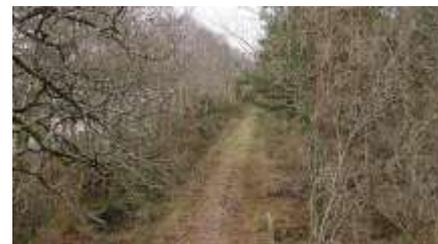
The 1 mile very steep branch line connecting Folkestone Harbour to the London-Dover line has been disconnected from the rail network, but the track formation and rails are largely still in place as far as the site of the former 'Folkestone East' station. The Harbour now in

the hands of a developer is no longer used as a ferry port but is a sensible asset for leisure activities and has land suitable for residential and commercial development. A suitable arrangement is being sought to convert the line to connect the seafront area to a point of interchange with mainline trains.



**Birmingham University Hospital**

The strangulation by road traffic of the main University/hospital campus in Birmingham will be mitigated by a light rail circle line linking to the Bristol Road. There was never a traffic problem when the iconic and elegant narrow gauge trams provided a clean frequent service along Bristol Road, Birmingham.



**Devon Line Vacant Corridor**

Heathfield & Bovey Tracey in Devon could benefit from a the reopening of the derelict line to Newton Abbot. Ecorail & LCT are looking again at Jane Taylors early studies now the once a week freight train is due to cease, allowing a light rail passenger service to run and extend using the old formation.

**With PPM's New Fully Self-Contained Powered Bogies, Customers Have The Option of Modern or Retro Styling.**

